



Schizophrenia and Related Disorders

Chapter 6

Class Objectives

- ☞ What is Schizophrenia?
- ☞ What are the features of Schizophrenia?
 - Positive symptoms
 - Hallucinations, delusions
 - Negative symptoms

Stop and Think...
How would you describe
Schizophrenia?

How would you describe a person
with this disorder?

THINK

Who has Schizophrenia?

- ☞ A middle-aged man walks the streets of New York with aluminum foil under his hat, so the Martians can't read his mind.
- ☞ A young woman sits in her college classroom and hears the voice of God telling her she is a vile and disgusting person.
- ☞ You try to strike up a conversation with the supermarket bagger, but he stares at you vacantly and will say only one or two words in a flat, monotone voice.

THINK

They ALL do!

Schizophrenia is classified as a psychotic disorder. These disorders are characterized by hallucinations and delusions, which involve a loss of contact with reality

History

- ☞ Schizophrenia comes from the Greek words for *split mind*
 - Bleuler's (1908) belief that underlying all the unusual behaviors was an *associative splitting* of the basic functions of personality.
- ☞ This phrasing contributed to a large misconception about Schizophrenia. Cognition, emotion and perception are splintered, it is NOT multiple personality disorder!



Schizophrenia



The broad category of schizophrenia includes a set of disorders in which individuals experience distorted perception of reality and impairment in thinking, behavior, affect, and motivation.

How disruptive is this disorder?



- ☞ Schizophrenia is a devastating disorder that has a tremendous impact almost every area of functioning.
- ☞ This disorder is characterized by a broad spectrum of cognitive and emotional dysfunctions, for a period of 1-month, including:
 - Hallucinations
 - Delusions
 - Disorganized speech & behavior
 - Inappropriate emotions



Schizophrenia Spectrum



- ☞ Schizophrenia is now classified as a spectrum disorder rather than a single disease entity.
- ☞ Section 3 of the *DSM-5* includes a set of symptom severity ratings.

Society tends to devalue and dehumanizes those with schizophrenia.



People with these severe mental disorders are twice as likely to be harassed in public as people without schizophrenia (Berzins et al., 2003).



Are people with Schizophrenia accurately portrayed in our society?



What preconceived images or ideas do you have about people with Schizophrenia?



Characters on TV and in movies, as well as images in the media commonly depict this disorder inaccurately and often promote distorted images of schizophrenia

More than 70% of T.V characters in
prime-time dramas with
schizophrenia are presented as
violent

More than 1/5 depicted as
murders.

Symptoms of schizophrenia
are divided into 2 categories:

☞ *Positive symptoms:*

- These are additions and the more obvious signs of psychosis- not to be confused with happy.

☞ *Negative symptoms:*

- Indicate the absence of normal behavior.

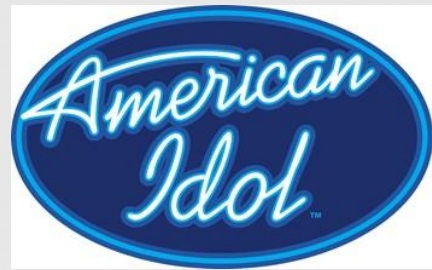
☞ Researchers proposed that positive symptoms reflected activated dopamine levels in the nervous system and negative symptoms reflected abnormalities in brain structure.

Positive symptoms

☞ *Delusions* are a false, unshakable belief.

- This symptom involves disorder of thought content and beliefs that are misrepresentations of reality.

☞ A person who believes the flickering street light is sending him messages from the aliens is delusional



Hi, Jesus Christ... Nice to meet
you.

☞ *Delusions of Grandeur* are the belief that you are more important than you are.

- For example when you believe that you are very special or have special powers or abilities.
- "I'm Napoleon" "I can cure cancer with my powers"

Delusions



- ☞ *Delusions of persecution* (paranoid delusions) can be the most disturbing for people with schizophrenia
- ☞ They believe they are being cheated, harassed, poisoned, or conspired against
 - A very common delusion effecting 1/3 of people with schizophrenia



“I know what that means...”

- ☞ *Delusions of reference* involve a belief that irrelevant, unrelated or innocuous things in the world have special personal significance.

While watching a re-run of the Cosby show, Dan recognizes that Bill Cosby is speaking directly to him. These “messages” are a sign from God that something bad is about to happen.



He must run and get as far as possible!

Delusions of Reference



- ☞ They believe people on television or radio are talking about, or talking directly to them.
- ☞ They believe the headlines or stories in newspapers are written especially for them.
- ☞ They believe that events have been deliberately created for them, or have special personal significance.

Did you hear that?!



Hallucinations are also positive symptoms of schizophrenia that are evidence of perceptual disturbance.



Hallucinations are false perceptions and inaccuracies that affect the senses.

- ☞ Causing people to hear, see, taste, touch or smell what others do not.
- ☞ Auditory hallucinations are the most common.

Understanding Hallucinations



Research found by using SPECT scan of the brain that the area of the brain most active during hallucinations was Broca's area

- linked to speech production.

This research suggests that people are not hearing the voices of others but they are listening to their own thoughts or voice and they can't recognize the difference (Hoffman, 1999)

In contrast to the presentation of new features with positive symptoms, negative features of schizophrenia indicate the absence of or insufficiency of "normal" behavior.



They include emotional and social withdrawal, apathy, and poverty of thought and speech.

Avolition (Apathy), is the inability to initiate/persist in important activities.

- People who are apathetic are uninterested in performing even the most basic day-to-day activities, like grooming/bathing.

Alogia is often referred to as poverty of speech. This is the relative absence of typical speech

- A person with alogia may respond with brief answers to questions that have little content and may appear uninterested in the conversation.
- Example: "Do you have children?" "Yes"

Are they just unsocial people?



This deficit in communication is believed to reflect a negative thought disorder, rather than inadequate communication skills.

- Research suggests that people with *alogia* may have trouble finding the right words to formulate their thoughts.

Ha, ha...Mom's dead!



Sometimes people with schizophrenia display inappropriate affect.

- Behavior that does not fit the mood is sometimes displayed, such as laughing or crying at inappropriate times
- Laughing at a funeral

People with schizophrenia often lack insight (awareness) and have disorganized thoughts and speech.

Disorganized Thoughts



☞ These are marked by looseness of associations, in which the patient rambles on from topic to topic in a disconnected way tangentially

- Where unrelated answers are given to questions



The “word salad” is also displayed in which the patient’s speech is so incoherent that it makes no grammatical sense

Physical characteristics

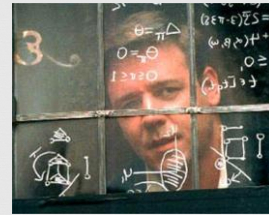
☞ Some people are very physically agitated
- “psychomotor agitation”

☞ Others in the other extreme, hold unusual postures called catatonic immobility.

☞ This can also involve waxy flexibility, the tendency to keep their bodies in the positions someone else puts them in



Interview with John Nash



Course of Schizophrenia

☞ In the most serious cases, the individual experiences *continuous* positive symptoms with no remission.

☞ When the individual’s symptoms no longer interfere with his or her behavior and are below those required for a DSM diagnosis, the disorder is considered to be in *Remission*.

☞ The course and outcome for people with Schizophrenia are poorer as compared to other psychological disorders.

- More recurrent episodes are likely during the first 10-15 years and their chances of fully recovering are less likely than other disorders.
- Most continue to experience disorganized thinking and psychotic symptoms.

If treatment is received during an active phase, over 40% can recover for one or more years at a time

- Poorer cognitive skills, a longer period of time without treatment, substance abuse, a poorer course of early development, higher vulnerability to anxiety, and negative life events re some of the factors that contribute to poorer prognosis
- Men are at high-risk if they possess these additional characteristics

Men are more likely than women to:



- ☞ Experience the negative symptoms
- ☞ Have poorer social support networks
- ☞ Have poorer functions over time

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)

Statistics on Schizophrenia

- ☞ Schizophrenia is a chronic and disabling brain disease that effects 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).

Statistics



- ☞ Schizophrenia affects slightly more males than females
 - For every three men who develop schizophrenia over the course of their lives, two women are affected with the disorder.
- ☞ People with schizophrenia are two to three times more likely to die compared to others within their age group.

Theories on Schizophrenia have traditionally fallen into two categories:

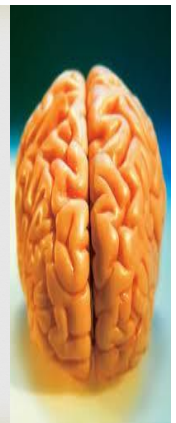
Biological and Psychological



Current models propose that individuals have a biological pre-disposition, but only when certain environmental conditions are in place.

Biological Theories

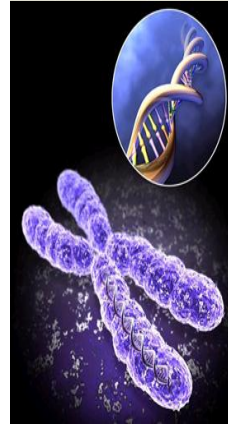
- ☞ Brains of people with schizophrenia have enlarged ventricles which occurs in people with schizophrenia alongside *cortical atrophy*.
 - A wasting away of brain tissue.
- ☞ *Neurodevelopmental hypothesis* proposes that schizophrenia is a disorder of development that arises during the years of adolescence or early adulthood due to alterations in the genetic control of brain maturation.
 - Individuals having their first psychotic episodes have a number of inexplicable brain abnormalities as the result of the illness.





Family studies

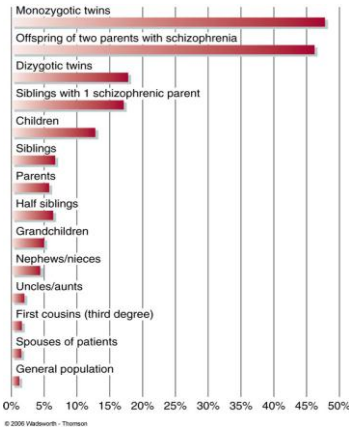
Suggest that people do not inherit a predisposition for one type of schizophrenia, but rather a general predisposition for schizophrenia that manifests in a particular form of schizophrenia.



Genetic Influences

☞ 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 biological risk of developing Schizophrenia

Other causes

☞ Another theory suggests that there is some relationship between high levels of the neurotransmitter Dopamine and schizophrenia.

- 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.



Can Schizophrenia be Treated?



☞ Neuroleptics (anti-psychotics) were help people with schizophrenia think more clearly and reduce or eliminate hallucinations and delusions by working on dopamine receptors areas in the brain.

- Reduce the positive symptoms but are less effective in controlling the negative and disorganized.

- ☞ Typical ("first generation")
- ☞ Atypical ("second generation")

Antipsychotic Medications

☞ First generation anti-psychotics produced serious side-effects *Extrapyramidal symptoms (EPS)* which include motor difficulties similar to those experienced by patients with Parkinson's disease.

- *Tardive Dyskinesia*- involuntary motor movements

☞ Second generation antipsychotics work on both dopamine and serotonin produce less side-effects (Zyprexa, Risperdal, Seroquel).

- Approximately 50-70% of patients will show improvement to some degree.



Psychological Treatments



☞ 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

Putting it all together



☞ 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