

Psychotic Disorders

DSM-IV

Psyc 101 Guest Lecture

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Psychosis

- Psychosis is a condition characterized by a loss of contact with reality.
 - Hallucinations: false perceptions
 - Delusions: false beliefs

Examples of Hallucinations and Delusions

■ Hallucinations

Hearing voices

Seeing visions

Experiencing odd tastes,
smells

Experiencing odd
feelings

■ Delusions

Persecution

Grandeur

Somatic

Jealousy

Erotomania

Thought control

Behavior control

Thought withdrawal

Psychoses may be caused by

- Drugs: e.g., LSD, Amphetamines, Cocaine
- Brain Diseases: e.g., Alzheimer's Disease
- Brain Injuries: e.g., trauma, stroke
- Extreme stress: e.g., war, kidnapping,
- Bipolar and major depressive disorders
- Schizophrenia--most common cause

Some Recent Cases

- Ted Kaczynski--the unabomber
- Mark David Chapman--killed John Lennon
- John Hinckley--shot President Reagan
- Andrea Yates--drowned her five children

*Note: most schizophrenics are not violent

A few facts about schizophrenia

- Usually diagnosed in late teens/early 20's
- Means "split mind": Eugen Bleuler
- Affects approximately 1% of people
- Men have more severe cases
- 10-15% commit suicide
- More common among the poor

Diagnosing Psychiatric Disorders

- All psychiatric disorders including schizophrenia are diagnosed on the basis of clusters of symptoms
- There is no brain scan, no urine test, no blood test, no cerebral spinal fluid test that can be used to diagnose schizophrenia

Positive and Negative Symptoms

■ Positive

- Hallucinations
- Delusions
- Disordered speech
- Bizarre behavior

- Good response to drugs, normal brain ventricles, limbic system abnormalities

■ Negative

- Emotionally flat
- Poverty of speech
- Asociality
- Apathy
- Avolition

- Frontal lobe abnormalities, enlarged ventricles, variable response to drugs

Diagnostic Criteria for Schizophrenia

- Delusions
- Hallucinations
- Disorganized Speech
- Disorganized or catatonic behavior
- Negative Symptoms (deficits)
 - Two or more of the above must be present for at least one month and some disturbance for six months
- Significant impairment in social/occupational functioning

Disorganized Speech

- Disorder of thought *form*
- Loose Associations
- Thought derailment
- Neologisms (making up words)

Etiology (Causal Factors)

- No one factor can fully explain
- Very good evidence for genetic transmission of a predisposition
 - Probably polygenic
 - Suspect chromosomes 22, 6, 8, and 1
- Some evidence for other biological factors

Genetic Studies

- Family studies: risk increases as number of shared genes increases
- Twin studies: concordance rate higher in identical than fraternal twins
- Adoption studies: biological relatives show increased risk

Other suggested causal factors

- Prenatal viral infections, esp. 4 -7 month
- Rh incompatibility between mother and baby
- Early nutritional deficiencies
- Birth complications

Other Biological Aspects

- Enlarged ventricles
- 3% reduction in overall brain volume
- Amygdala, frontal lobes, temporal lobes, hippocampus, thalamus
- Most brains look normal
- Dopamine
- Glutamate

Treatment

- Antipsychotic medications
 - Thorazine (conventional, typical)
 - Tardive dyskinesia serious side effect
 - Clozaril (atypical)
- Case Management
- Family Therapy
- Psychotherapy usually NOT appropriate

Conclusions

- Schizophrenia affects about 1% of the world's population and disables more people than any other physical or mental disorder.
- The cost to society is enormous. Direct medical care in the U. S. is estimated to be 20 billion dollars per year (Torrey, 1995). Loss of productivity is incalculable.
- There is excellent research going on in many areas-- neuroscience, genetics, molecular biology, psychology, pharmacology, and other areas.
- We should have the genes identified in the next five years.