

Schizoaffective Disorder

- Schizoaffective Disorder has features of both schizophrenia and a mood disorder. Clinically, this often creates great confusion. The essential feature is an illness that is ongoing, not episodic, in which there is a psychosis, and during which, mood disorder symptoms appear for a substantial length of time - either depression or mania. Treatment is with mood stabilizers and antipsychotics.

Schizophrenia Demographics

- WHO multi-center studies -
9 countries
- Near uniform incidence of
an illness with a variable
course - outcome is usually
better in developing
countries
- 1% in most populations
- 20 million worldwide
- 2-4 million in USA
- 50,000 new cases/yr

Demographics

- The age of onset is almost always before 35.
- Intelligence follows a normal bell curve.
- There is no racial difference in incidence, but African Americans are more likely to be diagnosed with schizophrenia, and more likely to receive higher doses of injectable antipsychotics.

Demographics

- 800,000 Americans are homeless on any given night. 25% have a mental illness. 11% are schizophrenic. Their mortality is 3-4x general population. They are 40% more likely to be violent and 25% more likely to commit homicide than a non-homeless person with schizophrenia.
- There may be more variability in incidence than thought. May be more common in men and certain urban areas.

Frequency of Symptoms

- Lack of insight 97%
- Auditory hallucinations 74%
- Ideas of reference 70%
- Suspiciousness 65%
- Flat affect 65%
- Paranoid state 64%
- Thought alienation 52%
- Thoughts spoken aloud 50%

The Five Factors of Schizophrenia

Cognitive Symptoms

Anxiety/depression

Negative
Symptoms

Positive
Symptoms

Uncontrolled hostility/excitement

Negative Symptoms

- Restricted emotional expression, reduced initiative, poor rapport, poor hygiene
- These may be the most distinctive feature of schizophrenia
- They appear earlier, are harder to treat, and worsen over time, unlike positive symptoms
- Antipsychotics cause negative symptoms in healthy volunteers.

Positive Symptoms

- Hallucinations, bizarre delusions (most frequently of prosecution, or of being controlled by outside forces, x-rays, outer space), autistic language, mutism, echolalia, word salad, autistic logic, thought blocking
- Less a cause of disability than negative symptoms

Cognitive Symptoms

- Disorganized and dissociative thinking
- Loss of attention, memory, executive function, verbal skills, motor skills
- Generalizations are incorrect
- Trouble with abstraction
- Difficulty with understanding the main idea
- May be the most disabling aspect of the illness

Areas of Disruption

- Verbal learning and memory
- Speed of processing
- Working memory
- Reasoning and problem solving
- Attention and vigilance
- Visual learning and memory
- Social learning

Cognitive Deficits

- Normal score on Wisc Card Sorting Test among 10 year olds is 5 out of 6. Schizophrenics who are employed - 3. Schizophrenics who are unemployed - 1.
- None of the drugs currently used to treat schizophrenia restore cognition, although second generation antipsychotics improve some areas of cognition in some clients.

Uncontrolled Hostility and Excitement

- Clients may become agitated and hostile under stress, although most do not become violent.
- The risk of committing homicide is 10x greater in the schizophrenic population than the general population. The risk is 17x higher in schizophrenic, alcoholic men and 80x higher in schizophrenic, alcoholic women.
- Command hallucinations increase risk in some clients but not others.

Anxiety/Depression

- 40% of people with schizophrenia report suicidal ideation
- 25-50% attempt suicide
- 10-15% complete suicide (50x risk of general population)
- Treatment with an antipsychotic is usually sufficient
- 45% have an anxiety disorder: panic 24-45%, agoraphobia 27%, social anxiety 17-36%, GAD 13%, PTSD 13-33%, ObComp 13-24%

Gender

- Cumulative risk for developing schizophrenia may be higher for men.
- Diagnosis comes later for women. (Is this because men are more problematic?)
- Deficit symptoms are more prevalent in men. They smoke more and abuse substances more. They usually have a worse premorbid history and have a poorer overall course of illness.

Gender

- Women form stronger treatment alliances. They have more comorbid problems with mood, sleep, pain, allergies, endocrine, eating disorders, personality disorders. They have more affective symptoms, auditory hallucinations, persecutory delusions. But their symptoms are less severe with fewer hospitalizations, better employment, fewer legal problems, better intimate relationships, lower mortality.
- They respond to lower doses of medication until menopause. But they have more side effects, more TD.
- Mortality is lower in women. Risk of unplanned pregnancy is high due to rape or no birth control. Antipsychotics may cause amenorrhea.

Genetic Risks

- General population 1%
- Schizophrenia in parent 3.8%
- Schizophrenia in sibling 8.7%
- Schizophrenia in fraternal twin 10%
- Schizophrenia in identical twin 40-50%

Genetics

- Schizophrenia has the highest heritability of any mental illness, with estimates reaching 80% of the variance.
- Single gene models do not explain the pattern of illness in either families or twins.
- Some of the same genes are involved with major depression and bipolar disorder. Environmental factors are crucial.

Environmental Factors

- Winter birth
- Urban density
- Viral infection
- Malnutrition during fetal life
- Extreme prematurity
- Hypoxia and ischemia
- Level of family functioning may be protective

Biology of Schizophrenia

- Brain imaging shows enlargement in the ventricular system and decrease in gray matter. Treatment with antipsychotics can increase brain volume.
- fMRI shows reduced activity in the frontal lobe
- Genetic studies implicate a dysfunction involving NMDA glutamate, an excitatory amino acid critical for learning, memory, brain development, and plasticity of neurons. This system is regulated by dopamine.

Schizophrenia and AODA

- Substance abuse and psychosis commonly appear together. 50% are substance dependent, >70% are nicotine dependent
- People with schizophrenia rapidly move to dependence
- Substance abuse worsens the prognosis and the economic status of the user
- On the positive side, clients report that substance abuse helps with symptoms, boredom, anxiety, sadness, friends

Schizophrenia and AODA

- Smoking may reduce auditory hallucinations, improve concentration, decrease EPSE's, and be an antidepressant. Smoking also reduces the blood level of various antipsychotics.
- Some substances cause psychotic symptoms
 - Alcohol withdrawal (12 hours - 7 days after abstinence)
 - Cannabis (acute and short lived)
 - Cocaine (transient paranoia is common, euphoria - dysphoria - psychosis)
 - Amphetamines (repetitive sorting - paranoia - psychosis)
 - Hallucinogens (no evidence for chronic illness)
 - PCP/Ketamine (dissociative states, seizure, death)

Treatment of AODA in the Schizophrenic Population

- Adaptation is necessary for low motivation, poor self-efficacy, and maladaptive personal skills
- A therapeutic alliance is very important. Clients need a nonjudgmental, nurturing ally.
- “Harm reduction “ might be the better approach while trying to keep the client engaged in treatment

Treatment of AODA in the Schizophrenic Population

- Clinicians need to
 - Be more active
 - Keep treatment ongoing
 - Deal with denial of mental illness and poor compliance with medication
 - Accommodate for problems with attention, memory, and awareness of reality
 - Train social skills
 - Be aware of stigma of illness and medications
 - Watch for coffee and tea complications
 - Monitor disulfiram if it is used

Natural History

- If treated, 75% will recover fully after the first episode, 11% partially, 14% not at all.
- With no treatment, after recovery, 10% will relapse per month, 50% in the first year, 100% by the third year.
- Most of the functional deterioration occurs during the first 5 years of the illness. A small percentage will improve later in life.
- It is more difficult to recover from each subsequent episode of psychosis.
- A recent study does indicate periods of recovery

Phases of Schizophrenia

- Premorbid - impaired attention, subtle social deficits, soft neurological signs.
- Prodromal - perceptual disturbance, paranoia, mood lability, cognitive decline. 30-50% will progress to schizophrenia in 1 year.
- Onset - positive symptoms recognizable as schizophrenia.
- Progressive - recovery
- Relapse - in spite of treatment
- Chronic/Residual - higher doses, adjunctive treatments

Natural History

- Prediction of poor outcome
 - Poor premorbid adjustment
 - Early and gradual onset
 - Absence of affective features
 - Male gender
 - Duration of psychosis before treatment
 - More psychotic episodes
- Discontinuing medication increases the relapse rate by 5x.
- Noncompliance after the first episode is 75%.

Treatment

- Clients with schizophrenia identify the following factors that interfere most with their quality of life:
 - Depression
 - Anxiety
 - EPSE's
 - Taking medication

Biological Treatment

- Antipsychotic drugs treat psychosis but not schizophrenia. Efficacy for negative symptoms and cognitive problems is modest. The primary benefit of the drugs is to prevent relapse. The atypical antipsychotics may be better for hostility and depression in schizophrenia than the older drugs.
- These drugs work in 66-70% of clients
- Continuous low dose is the best strategy

Psychosocial Treatments

- Assertive community treatment (ACT) reduces frequency of hospitalization, increases housing stability, shows high satisfaction from clients and families.
- Integrated dual disorders treatment
- Supported employment - individual placement and support (IPS) is effective
- Family psychoeducation reduces relapse, improves symptomatic recovery, enhances family outcomes. Programs must > 9 months.
- Social skills training improves social skills
- Personal/Cognitive therapy may help with delusions, hallucinations, social functioning

Cognitive Behavioral Therapy

- Randomized controlled trials demonstrate that clients who receive CBT along with medication have significant improvement in both negative and positive symptoms.
- Three basic areas are emphasized:
 - Adherence to medication
 - Understanding the illness
 - Challenging delusions and distortions

Cognitive Behavioral Therapy

- Key techniques:
 - Developing a therapeutic alliance
 - Developing an explanation of the client's symptoms that is satisfactory to both client and clinician
 - Reducing stress and severity of positive symptoms by normalization, exploration, and building strategies of adaptation

CBT Therapeutic Process: Five Steps

- Identify the problem the patient wants to work on
- Rate the identified symptom on a 1-10 scale
- Choose and use an intervention
- Rate the target symptom again and give feedback
- Ask the client to write down what is learned and give the client an assignment to reinforce the learning at home

Improving Therapeutic Alliance

- Normalization
- Universality
- Collaboration
- Focus on client's goals

Thought Disorder

- Point out that you are having trouble understanding the client. Ask if others have problems understanding him.
- Thought disorder worsens the more someone talks. Keep your speech short.
- Thought disorder also worsens with anxiety.

Vocational Functioning

- Among clients treated with FGA's, only 10% ever work fulltime. Working at a paid job is one of the most important determinants of quality of life. Cognitive dysfunction is the most important variable in being able to work.
- The proportion who are able to work in “competitive” employment has not changed in 20 years. If a client is placed in a job first, then trained how to do it, there is a 50% retention rate.

CATIE Project

- 14.5% competitively employed
- 12.6% in other employment
- 72.6% not employed
- Employment associated with:
 - Less severe positive, negative, cognitive problems
 - Motivation/ empathy
 - Higher education
 - Availability of psychosocial rehabilitation

CATIE Project

- African Americans, and those receiving disability checks were less likely to be competitively employed - the difference between competitive and non-competitive employment is social.
- The cognitive problems that cause actual functional disability are those that affect making social inferences.

Vocational Needs

- Interpreting the behaviors of co-workers
- Understanding how “personal” work relationships should be
- Recognizing how their behavior effects others
- Problems with substance abuse
- Transportation and clothing
- Performance of job tasks
- Dependability

Training Modules

- Identifying how work changes your life
- Learning what the job expectations are
- Identifying personal strengths and preferences
- Learning to cope with stress
- Learning to manage symptoms and medications
- Learning to manage health concerns and substance abuse
- Learning how to interact with supervisors/peers
- Learning how to socialize successfully
- Learning how to recruit social support

Health Problems

- Medical comorbidity
 - 40% are obese (vs. 27% in general population)
 - 75% smoke (vs. 25% in general population)
 - 47% AODA issues
 - Diabetes twice the rate
 - Sudden death 3x higher
 - Cardiovascular death twice as high
 - Increased death rates from infectious disease and respiratory illness.

Health Problems

- Weight gain and obesity
 - BMI >27, waist >35”w, >40”m
- Diabetes
 - Glucose, family history
- Hyperlipidemia
 - Metabolic syndrome (abdominal obesity, elevated glucose, triglycerides, low HDL, hypertension)
- Q-T prolongation
- Elevated prolactin
- EPS, akathisia, tardive dyskinesia