Introduction

Schizophrenia

Presented by UIC-CON
Learning Objectives

- Obtain working definition of Schizophrenia and Schizoaffective Disorder
- Understand Symptomology of Schizophrenia and Schizoaffective Disorder
- Develop treatment modalities for Schizophrenia and Schizoaffective Disorder
- Understand Challenges in treatment of both disorders
Schizophrenia is a psychological disorder. It is classified separately from other disorders because it is easily categorized as an anxiety or mood disorder. Characterized by inability to separate reality from non-reality, schizophrenics often experience non-existent stimuli that create perceptions of things that do not exist, such as voices. Symptoms may include: flat affect, delusions, hallucinations or disorganized thinking.
Family Statistics

- General population: 1%
- First cousins: 2%
- Uncles / Aunts: 2%
- Nephews / Nieces: 4%
- Grandchildren: 5%
- Half siblings: 6%
- Parents: 6%
- Siblings: 9%
- Children: 13%
- Fraternal twins: 17%
- Identical twins: 48%
Clinical features of Schizophrenia

- **Positive symptoms**: delusions, hallucinations, Thought disorders (unusual or dysfunctional ways of thinking). Movement disorders (agitated body movements)

- **Functional impairments**: work/school performance; interpersonal relationships; self-care deterioration

- **Negative symptoms**: autism, affective flattening, avolition, social withdrawal, alogia, “Flat affect” (reduced expression of emotions via facial expression or voice tone), reduced feelings of pleasure in everyday life, difficulty beginning and sustaining activities, reduced speaking

- **Cognitive deficits**: attention, memory, verbal fluency, executive function

- **Disorganization**: inappropriate affect, disorganized behavior, thought disorder

- **Mood symptoms**: depression/anxiety; aggression/hostility; suicidality
Prodromal symptoms

- Severe anxiety
- Severe distractibility
- Person feels “strange”
- Symbolization, mysterious thinking
- Profound withdrawal, isolation
- Rejection, paranoid thinking
- Preoccupation with religion
- Altered sexuality, preoccupation with homosexual themes
- Speech and language disturbance
Causes of Schizophrenia

Multiple *possible* factors:

- Genetics
- Biologic
- Environmental
- Brains
Johan and Ad van Bennekom are identical twins, both diagnosed with schizophrenia.

The left brain is diagnosed with schizophrenia. The brain on the right is healthy. The schizophrenic’s fluid-filled areas are larger.
Types of Schizophrenia

- Catatonic
- Disorganized
- Paranoid
- Residual
- Undifferentiated
Schizophrenic Delusions

- Delusion is a false belief
- Common delusions: being cheated, harassed, poisoned, spied upon, plotted against
- Grandiosity
Schizophrenic hallucinations

Hallucination: non-existent stimulus that is perceived as real

- Auditory: interact with person, commenting on behavior, telling them to do things, warning of impending dangers, talking to other voices about person
- Visual, seeing person or object that does not exist
Sometimes people comment on my weight, but it's like I have contradictory voices talking over my shoulder.

So even if the words are complimentary, they mean nothing because they're so easily explained away.
Suicide in Schizophrenia

People with schizophrenia attempt suicide much more often than people in general population

- About 10% (especially young males) succeed
- Hard to predict which schizophrenics are prone to suicide
Treating Schizophrenia

- Antipsychotic medications
- Therapy and counseling
Types of Drug treatment

- Antipsychotic medications
- Adjunctive medications: Lithium carbonate, antidepressants, benzodiazepines, anticonvulsants
- Other medications: Antiparkinsonian medications, beta blockers
Antipsychotic Side Effects

Typical Antipsychotic Limitation
(Extrapyramidal effects: EPS):

- Parkonsonian
- Akathesia
- Dystonia
- Tardive Dyskenesia (TD)
EPS continued

- Anticholinergic EPS: dry mouth, constipation, blurry vision, tachycardia
- Orthostatic hypotension
- Sedation (antihistamine effect)
- Weight gain
- Neuroleptic dysphoria
EPS continued

- Parkinsonian side effects: rigidity, tremor, bradykinesia, mask like facies

- Management: lower antipsychotic dose if feasible, change to different drug (atypical antipsychotic), anticholinergic medications (Benztropine)
<table>
<thead>
<tr>
<th>Good prognostic Factors</th>
<th>Poor prognostic Factors</th>
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<tbody>
<tr>
<td>1. Acute or abrupt onset</td>
<td>1. Insidious onset</td>
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<tr>
<td>2. Onset &gt; 35 years of age</td>
<td>2. Onset &lt; 20 years of age</td>
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<tr>
<td>3. Presence of stressor</td>
<td>3. Absence of stressor</td>
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<tr>
<td>4. Catatonic subtype</td>
<td>4. Disorganizes, simple, undifferentiated</td>
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<tr>
<td>5. Good premorbid adjustment</td>
<td>5. Poor premorbid adjustment</td>
</tr>
<tr>
<td>6. Short duration (&lt; 6 months)</td>
<td>6. Chronic course (&gt; 2 years)</td>
</tr>
<tr>
<td>7. Presence of depression</td>
<td>7. Absence of depression</td>
</tr>
<tr>
<td>8. Predominant positive symptoms</td>
<td>8. Predominate negative symptoms</td>
</tr>
<tr>
<td>10. Female sex</td>
<td>10. Male sex</td>
</tr>
<tr>
<td>11. Good social support</td>
<td>11. Poor social support</td>
</tr>
<tr>
<td>12. Normal Cranial CT scan</td>
<td>12. Ventricular enlargement on CT</td>
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Challenges in treatment of Schizophrenia

- Stigma
- Impaired “insight”- no agreement on problem
- Treatment “compliance”/medication adherence
- Substance abuse very common
- Violence risk
- Suicide risk
- Medical problems common, often unrecognized
It’s pronounced...
[skit-suh-FREE-nee-uh]
not
[KREY-zee]

Fight Stigma
Treatment: important considerations

- Comprehensive and continuous treatment for prolonged periods for most
- Integrated, bio-psychosocial approach to care
- Active collaboration with family while planning and delivering treatment
- Treatment sensitive to patient’s needs and empirically titrated to patient’s response and progress
Therapeutic goals
1. Minimize symptoms
2. Minimize medication side effects
3. Prevent relapse
4. Maximize function
5. “recovery”

Types of treatment
1. Biological treatment: pharmacotherapy, ECT, psychosurgery, deep brain stimulation
2. Psychosocial/psychotherapeutic treatment
Individualized guidelines:

- 1st episode patients: 1-2 years maintenance
- Patients with severe episode or exacerbation: >5 years of maintenance
- Patient with history of aggression/suicide attempts: indefinite period, even life long
Non Pharmacological Treatment

- Psychoeducation
  - empowers patient to take control of their own illness
  - start basic and acquire consent to discuss with patient’s family
  - confidence in diagnosis to avoid stigma
  - provides information about schizophrenia: course, symptoms, treatment, coping strategies
Psychoeducation, continued

- Supportive
- One aim to decrease expressed emotion (hostility, criticism, etc.)
- Not blaming
Relapse Signature/Prevention

- **Signature**: set of individualized symptoms occurring in a specific order over a particular time that patient can learn to identify and manage themselves.
- **Prevention**: offers timely and effective intervention to arrest progression towards frank psychosis.
Psychotherapy (individual or group)

- Supportive
- Cognitive-behavioral
- “Compliance” therapy
- Psychoeducational
- Non-regressive/ psychoanalytical
Supportive therapy
1. Focuses on “here and now”
2. Helps patient define reality more clearly and solve practical problems
3. Involves providing reassurance, offering explanations and clarification, and giving guidance and suggestions
4. May reduce patient’s feelings of aloneness and isolation
5. May increase adherence to medications
6. May reduce suicidal ideation and behaviors
Cognitive Behavioral Strategies

- Emotional distress is assumed to be associated with faulty thinking, which, if modified can alter emotional responses.
- Generally begins with several sessions assessing the patient’s symptoms and distress associated with symptoms.
- Coping strategies that the patient may have used might be reviewed.
- Therapy aims to address issues systematically over a fixed number of sessions.
High levels of criticism, hostility, or over involvement have more frequent relapses.
Relatives influence the outcome of the disorder through negative comments and non verbal actions.
Stress from the family for the patient to recover and end certain behaviors can cause person a relapse in their illness.
Psychotic Relapse

Common factors associated with psychotic relapse:
- Antipsychotics not completely effective
- “noncompliance” (non-adherence)- inconsistent antipsychotic medication use
- Poor family economic status
- Stressful life events/home environment (Expressed emotion)
- Alcohol and/or drug use
Some people decide not to adhere to antipsychotic medications

A Harm reduction intervention aims to acknowledge the patient’s ability to choose and learn from experience and to reduce the potential harm of antipsychotic withdrawal.
Adherence Improvement Efforts

- Adherence Therapy
- Antipsychotic long-acting injections
- Supervised community treatment
Interventions: non-adherence harm reduction

- Patient choice
- Harm reduction: pragmatic, prioritizes goals, has humanistic values, focuses on risks and harm, does not focus on adherence.
Helping

- Get them treatment and encourage them to stay in treatment
- Remember that their beliefs or hallucinations seem very real to them
- Tell them that you acknowledge that everyone has the right to see things their own way
- Be respectful, supportive, and kind without tolerating dangerous or inappropriate behavior
- Check to see if there are any support groups in your area
Join a Study

- Find NIH-funded studies currently recruiting participants with schizophrenia by using [ClinicalTrials.gov](https://clinicaltrials.gov) (search schizophrenia) or visit [Join a Study: Adults - Schizophrenia](https://clinicaltrials.gov/ct2/results?cond=schizophrenia&view=40).
Famous People With Schizophrenia

John Nash – Nobel Prize winner

Syd Barret – guitarist for Pink Floyd

Mary Todd Lincoln – wife of Abraham Lincoln
Schizophrenia Trivia

- Schizophrenia, along with depression, is one of the only disorders known to exist in every culture and society around the world.
- Schizophrenia affects men and women equally, yet is usually diagnosed earlier in men.
- Schizophrenia has received a significant stigma in history and modern society, further exacerbating social withdrawal.
- ECT has proven safe and effective in treating severe cases of schizophrenia.
Schizoaffective Disorder

PART II of Presentation
Illness characterized by psychotic symptoms (delusions and hallucinations) and mood problems

- Two types: bipolar and depressive
- No specific cause
- Symptoms and signs include those of schizophrenia in addition to manic episode and/or a major depressive disorder
- Onset is usually early adulthood, though can occur in late adolescence
Manic Type

- Acute onset
- Elated mood
- Increased self-esteem
- Grandiose ideas, delusions of reference, grandeur, or persecution
- Increased irritability or excitement
- Increased energy
- Overactivity
- Impaired concentration
- Loss of normal social inhibition
Depressive Type

- depressed mood
- easy fatigability
- Anhedonia
- loss of energy
- Loss of appetite
- Loss of weight, occasionally weight gain
- impaired libido
- guilt, feelings of hopelessness and suicidal thoughts
- impaired concentration
- Psychomotor retardation, agitation
Causes and Risk Factors

- No specific cause
- 2/3rds diagnosed are women
- Family history
- Stress
- Children and bullying, abuse, neglect, or parental death
- Brain chemistry
- Brain development delays or variations
- Exposure in the womb to toxins or viral illness, or even birth complications
Signs and symptoms

- Hallucinations
- Delusions
- Disorganized speech
- Severely disorganized or catatonic behaviors
- Negative symptoms
- Cognitive symptoms
- Changes in appetite and energy
- Lack of concern with hygiene or grooming
- Mood that is either too good, or depressed or irritable
- Problems sleeping
- Problems with concentration
- Sadness or hopelessness
- Social isolation
- Speaking so quickly that others cannot interrupt you
Associated features

Associated Features and Disorders

There may be poor occupational functioning, a restricted range of social contact, difficulties with self-care, and increased risk of suicide associated with Schizoaffective Disorder.

Residual and negative symptoms are usually less severe and less chronic than those seen in Schizophrenia. Anosognosia (i.e., poor insight) is also common in Schizoaffective Disorder.
How diagnosed?

- Rule out medical problem, drug use
- Patient's history, a physical examination. Laboratory and other tests, sometimes including a computerized tomography (CT) scan of the brain
Diagnosis Criteria

- An uninterrupted period of illness that includes either a major depressive disorder or a manic episode along with at least three active symptoms of schizophrenia (hallucinations, delusions, disorganized speech, severely disorganized or catatonic behaviors, negative symptoms like decreased emotional expression or movement).

- Delusions or hallucinations occur at least two weeks without major depressive or manic symptoms at some time during the illness.

- The major mood symptoms occur for most of the duration of the illness.

- The illness is not the result of a medical condition or the effects of alcohol, other drugs of abuse, or a medication.
Treatment

- Symptom based:
  1. individuals with the bipolar
  2. people with the depressive type

- Consistent treatment is important.

- ECT

- Co-morbidity
Medication Treatment

- Neuroleptics (Thorazine, Prolixin, Haldol, Navane, Stelazine, Mellaril)
- Atypical antipsychotics (Clozaril, Risperdal, Zyprexa, Seroquel, Geodon, Abilify)
- Mood Stabilizers (Lithium, Depakote, Tegretol, Lamictal)
- Anti-depressants (Prozac, Zoloft, Paxil), Celexa, Lexapro, Effexor, Cymbalta, Wellbutrin)
Hospitalization

Hospitalization Goals and Plan

- Interdisciplinary team goals: Nursing
  - Decrease restlessness and irritability
  - Improve worry and anxiety
  - Increase self control and medication compliance
  - Prevent injury to self and others
  - Decrease hallucinations/delusions
  - Increase adaptive coping skills
Hospitalization

Hospitalization Goals and Plan

- Multidisciplinary team goals: Activity Therapy
  - Compliance with functional assessment, group therapy participation, increased self expression by providing structure and support, health education, and group therapy.
Complications

- Obesity, diabetes and physical inactivity
- Social isolation
- Unemployment
- Anxiety disorders
- Developing alcohol or other substance abuse problems
- Significant health problems
- Suicide
Prognosis

- Challenging
- Functionality
- Related to other mental illnesses
There is NO Great GENIUS without some touch of MADNESS
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Resources


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Resources

National Alliance on Mental Illness (NAMI)

Schizoaffective.org
Questions