Psychotic Disorders

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Goals

- Provide a working definition for psychosis
- Understand the spectrum of disorders in which psychosis can present

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Goals continued

- Understand schizophrenia as the prototypic psychotic disorder
  - Historical
  - Phenomenology
  - Etiology
  - Treatment

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Goals continued

- Understand the basis for other psychotic disorders and how they differ from schizophrenia
- Review diagnostic criteria for other psychotic disorders.

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What is Psychosis?

- Imprecise terminology
- Defined as loss in reality testing
- Manifested by disturbances in the formation and content of thoughts
- Lay terms = "crazy" or "insane"
- Heterogeneous group of disorders

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Where does it occur?

- Medical/Neurologic Conditions
  - General medical conditions
  - Dementia
  - Delirium (medications)
  - Substance-induced
- Mood Disorders
  - Bipolar disorder - mania
  - Major depressive disorder

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Where does it occur?

- Psychotic Disorders
  - Schizophrenia
  - Schizoaffective disorder
  - Delusional disorder

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Where does it occur?

- Personality disorders
  - Schizotypal
  - Schizoid
  - Paranoid
  - Borderline

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Schizophrenia - History

- Characterization of the phenomenology has changed over time
- Emil Kraepelin (1907)
  - "dementia praecox"
  - hallucinations, delusions
- Eugen Bleuler (1911)
  - "schizophrenia"
  - 4 A's = Associations, Affect, Autism, and Ambivalence

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Schizophrenia - History

- Kurt Schneider (1957)
  - 1st rank vs. 2nd rank symptoms
- T.J. Crow (1980)
  - positive and negative symptoms
- P.F. Liddle (1987)
  - psychomotor poverty syndrome, disorganization syndrome and reality distortion syndrome

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Schizophrenia - Today

- DSM IV Criteria
  - Two or more psychotic symptoms for 1 month (shorter if treated)
  - Impairment in social or occupational functioning
  - Some signs for at least 6 months
  - Not due to mood or schizoaffective disorder
  - Not due to medical, neurological or substance-induced disorder
  - Subtypes - catatonic, disorganized, paranoid, undifferentiated, residual

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Schizophrenia - Today

- 1% of population
- M=F for rate
- M 15-25, F 25-35 peak onset
- Wide spectrum of presentations reflects heterogeneous diseases
- Draws from past classifications
  - Deteriorating course
  - Positive symptoms
  - Negative symptoms

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Symptoms

- Formal thought disorder
  - Loose associations
  - Tangentially, circumstantially, thought blocking
- Delusions (content of thought)
  - Paranoid, control
  - Ideas of reference
  - Thought insertion or withdrawal
  - Jealously, guilt, grandiosity
  - Religious, somatic

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Symptoms continued

- Hallucinations
  - Auditory
  - Visual
- Behaviors
  - Bizarre, inappropriate, disorganized
  - Catatonia, amotivational
  - Violence (SI/HI)
- Affect
  - Blunted, restricted
  - Incongruent with mood

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Video Examples

- Look for specific symptoms
- Appreciate variety between patients

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Etiology

- Brain abnormality that interacts with environment and social stressors
  - Biochemical
  - Anatomical
  - Genetic
  - Psychosocial

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Etiology - Biochemical

- Dopamine metabolism hypothesis - too much dopamine around
  - medications are D2 antagonists
  - drugs that increase dopamine cause psychosis (amphetamines)
  - nigrostriatal, mesolimbic, mesocortical tracts
- Serotonin
  - data from effective medications
- GABA - inhibitory neurotransmitter
  - loss of cell bodies in hippocampus

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Etiology - Anatomy

- Reduced brain structures -
  - seen on MRI/CT as ventricular enlargement
  - some specificity with symptoms
  - excessive pruning of synapses
- Functional studies - hypofrontal syndrome
- Eye movement dysfunction
- Neurocogitive dysfunction

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Etiology - Genetic

Population	%
General population	1.0
Nontwin sibling	8.0
Child with 1 parent	12.0
Dizygotic twin	12.0
Child with 2 parents	40.0
Monozygotic twin	47.0

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Etiology - Psychosocial

- Clearly a biologic illness
- Affected by stress like CAD/MI, DM
- Psychodynamic theories
- Expressed emotion
  - patients in families with high EE relapse more often
- Social class - downward drift
- Supportive therapy
  - results in better quality of life and lower relapse rate

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Treatment

- Biological
- Psychological
- Social

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Tx - Pharmacology

- Started in 1950s with chlorpromazine (Thorazine)
- Dopamine receptor antagonists
- Typical - older
  - D_2 >> 5HT, NE
  - treats positive symptoms
- Atypical - newer
  - broad receptor spectrum, $D_2 \approx$ 5HT
  - treats positive and negative symptoms

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Medication Comparison

Medication	Potency	Sedation	Hypo-tension	Anti-cholinergic	EPS
Chlorpromazine (Thorazine)	100	+++	+++	+++	++
Thioridazine (Mellaril)	95	+++	+	++++	+
Fluphenazine (Prolixin)	2	++	+	+	+++
Haloperidol (Haldol)	2	+	+	+	+++
Risperidone (Risperidol)	2	+	+	-	+
Olanzapine (Zyprexa)	2	++	+	+/-	+/-
Ziprasidone (Geodon)	20	++	+/-	+	+/-
Clozapine (Clozaril)	50	+++	+++	++++	+

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Side Effects

- Immediate
  - Parkisonism
  - Acute dystonia
  - Acute akathisia
- Delayed
  - Tardive dyskinesia
- Emergent
  - Neuroleptic Malignant Syndrome

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Strategy

- Start with atypical neuroleptic
- Continue older medications only if effective and minimal side effect, get informed consent
- Clozaril is most effective, but has significant side effects
- ECT is an option for acute psychosis only, not maintenance.
- Hospitalization for acute stabilization
- Treat co-morbid conditions
  - depression, anxiety

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Psychosocial

- Behavior/social skills training
- Family therapy - expressed emotion
- Case management
- Group therapy
- Individual therapy
  - supportive
  - cognitive behavioral
  - insight-oriented

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Psychotic Disorders

- Brief psychotic disorder
- Schizophreniform disorder
- Schizoaffective disorder
- Delusional disorder
- Shared psychotic disorder
- Due to general medical condition
- Substance induced psychosis
- Psychotic disorder NOS

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Schizophrenia - Review

- Two or more psychotic symptoms for 1 month (shorter if treated)
- Impairment in social or occupational functioning
- Some signs for at least 6 months
- Not due to mood or schizoaffective disorder
- Not due to medical, neurological or substance-induced disorder
- Subtypes - catatonic, disorganized, paranoid, undifferentiated, residual

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Brief psychotic disorder

- Only having positive symptoms from schizophrenia
  - delusions, hallucinations, disorganization
- Duration from one day to one month
- Not due to medical, neurological or substance-induced disorder

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Schizophreniform

- Meets positive and negative criteria from schizophrenia
- Duration longer than one month, less than 6 months
- Not due to medical, neurological or substance-induced disorder

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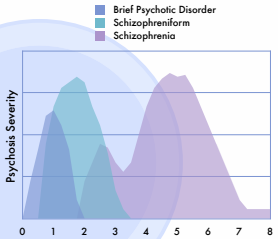
Time Frame Review



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Schizoaffective disorder

- Meets criteria for major depressive or manic episode and psychotic symptoms of schizophrenia
- 2 weeks of psychotic symptoms in absence of mood symptoms
- Mood symptoms represent significant portion of time both in active and residual phases
- Not due to medical, neurological or substance-induced disorder

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Delusional Disorder

- Non-bizarre delusions for one at least 1 month
  - being follow, poisoned, infected, loved, deceived
- Never has met psychotic criteria from schizophrenia
- Functioning is not markedly impaired
- Subtypes - erotomanic, grandiose, jealous, persecutory, somatic, mixed

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Shared psychotic disorder (Folie à Deux)

- Delusion develops in a person in the context of a close relationship with someone who has an already established delusion
- Similar content to delusion
- Not due to another mental disorder
- Not due to medical, neurological or substance-induced disorder

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Substance-induced psychotic disorder

- Prominent hallucinations or delusions
- Cannot include hallucinations if they realize it is due to the substance
- Evidence supports direct consequence of substance use
- Examples - LSD, mushrooms, amphetamines, alcohol hallucinosis, PCP, cocaine

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Psychosis due to general medical condition

- Prominent delusions or hallucinations
- Evidence supports direct consequence of medical condition
- Not due to other mental disorder
- Examples - temporal lobe epilepsy, neoplasm, stroke, trauma, AIDS, Herpes encephalitis, neurosyphilis, lupus, Wernike-Korsakoff syndrome

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Conclusion/Goal Recap

- What is psychosis?
- Where does psychosis occur?
- Understand schizophrenia and as the prototypic psychotic disorder
- Understand the basis for other psychotic disorders and how they differ from schizophrenia

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The end

Thank you

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