Schizophrenia Spectrum and Other Psychotic Disorders

PSYCH239

Did You Know That…

- You cannot be diagnosed with schizophrenia until months have passed, even though you show all the signs of the disorder?
- Despite wide differences in cultures, the rates of schizophrenia are similar in both developed and developing nations throughout the world?

Did You Know That…

- Auditory hallucinations may be a form of inner speech?
- Some people with schizophrenia maintain unusual, seemingly uncomfortable positions for hours during which they will not respond to questions or communicate with others?

Did You Know That…

- Even if you have two parents with schizophrenia, your chances of developing the disorder are less than 1 in 2?
- Living in a family environment that is hostile, critical, and unsupportive increases the risk of relapse among people with schizophrenia?
- Drugs can help control but cannot cure schizophrenia?

SCHIZOPHRENIA

- Schizophrenia is among the most puzzling & disabling clinical syndromes. Schizophrenia touches every facet of an afflicted person's life.

- Acute episodes are characterized by delusions, hallucinations, illogical thinking, incoherent speech & bizarre behaviour.

- Between episodes, people may still be unable to think clearly and may lack appropriate emotional responses to people & events in their lives.

CLINICAL FEATURES OF SCHIZOPHRENIA

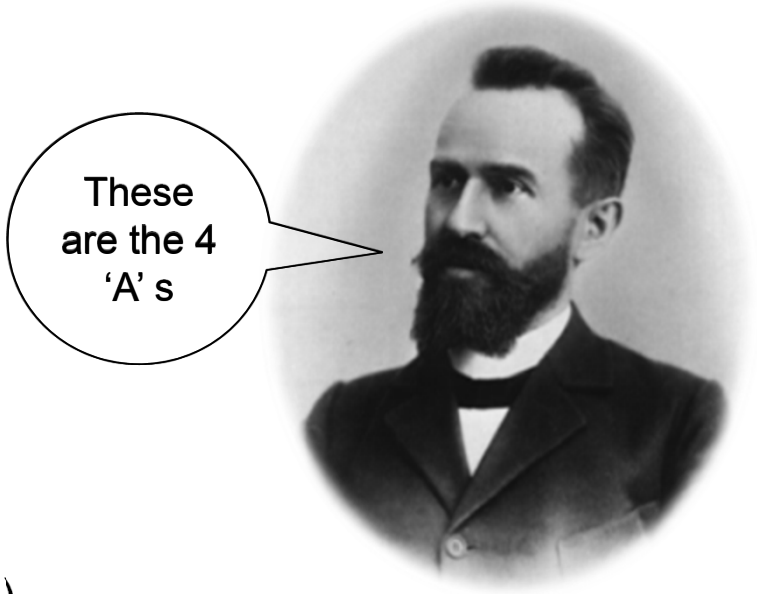
Historical Conceptions of Schizophrenia

- Emil Kraeplin (1856 – 1926).
  - *Dementia Praecox*

– "the loss of inner unity of thought, feeling, and acting."
– Progressive disease process
– Hallucinations, motoric abnormalities, delusions

Eugen Bleuler (1857 -1939)

- Associations
- Affect
- Ambivalence
- Autism



Introduced the term *Schizophrenia* (Sz)

- "split brain"
- Recognized variability in the course of the disorder

Kurt Schneider (1887 – 1967)

- Thought the 4 As overlapped too much with other disorders and wanted better differential criteria

- *First-rank symptoms*
  - Central to diagnosis of Sz, initially thought to be unique to Sz
  - ABCD
    - Auditory hallucinations
    - Broadcasting of thought
    - Controlling of thought (Echo, Insertion, Withdrawal)
    - Delusions
- *Second-rank symptoms*
  - Frequently associated with Sz, but not exclusively
    - Mood problems
    - Non-auditory hallucinations (visual, olfactory, haptic, gustatory)

Prevalence & Cost of Schizophrenia

- 1% of Population; fifth leading cause of disability.
- Social isolation
- Early adult onset, few cases spontaneously enter remission permanently
- Consequences can be devastating in virtually all main functional areas
- Homelessness and victimization are common
  - Properly treated, individuals with Sz are *no more harmful than members of the general population*
  - Often suspicious of family and professionals, so avoid Tx
  - Delusions may lead to fear that medications are poison or thought control agents
  - Medication side effects can be nasty (more about this later)
  - Poor compliance with social services and our reach workers make permanency planning difficult
  - May be reluctant to allows others into their residence to assess safety of home environment
  - About 20 x as likely as members of general population to complete suicide

CLINICAL FEATURES OF SCHIZOPHRENIA

Hallucinations.

Hallucination Simulator

SCHIZOPHRENIA

Phases of Schizophrenia

- Prodromal Phase
- Acute Phase
- Residual Phase

Major Features of Schizophrenia

- Disturbances of Thought & Speech
  - Disturbances in the *Content* of Thought
    - Delusions of persecution
    - Delusions of being controlled
    - Delusions of grandeur

SCHIZOPHRENIA

- Other Common Forms of Delusions
  - Thought Broadcasting
  - Thought Insertion
  - Thought Withdrawal

- Disturbances in the *Form* of Thought
  - Neologisms
  - Perseveration
  - Clanging & Blocking

SCHIZOPHRENIA

- Attentional Deficiencies
  - Hypervigilance

- Perceptual Disturbances
  - Auditory Hallucinations & Self-Talk
    - Auditory Hallucinations in 60% of cases
    - *Command Hallucinations*
  - Causes of Hallucinations

- Emotional Disturbances
  - Flatness of affect
  - Inappropriate affect
  - Often in facial expression

SCHIZOPHRENIA

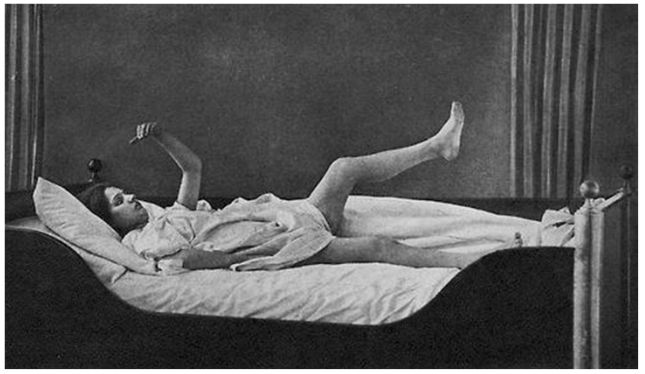
- Other Types of Impairment
  - Identity

- Previous Subtypes of Schizophrenia (NOT in DSM-5)
  - Disorganized
  - Catatonic
    - Waxy flexibility
    - Rigid
  - Paranoid
  - Undifferentiated

- Type I vs. Type II Schizophrenia – alternate conceptualization (Crow, 1980)
  - Positive symptoms & Negative symptoms
  - Premorbid Functioning: Poorer in Type II

SCHIZOPHRENIA

A person diagnosed with disorganized schizophrenia*.
One of the features of disorganized schizophrenia is grossly inappropriate affect, as shown by this young man who continuously giggles laughs and makes facial grimaces for no apparent reason.



A person diagnosed with catatonic schizophrenia*.
People with catatonic schizophrenia may remain in unusual, difficult positions for hours, even though their limbs become stiff or swollen. They may seem oblivious to their environment, even to people who are talking about them. Yet they may later say that they heard what was being said. Periods of stupor may alternate with periods of agitation.

* Again, these subtypes are *not* in DSM-5

DSM-5 Criteria: Schizophrenia

A. Two (or more) of the following, each present for a significant portion of time during a 1 -month period (or less if successfully treated). At least one of these must be (1), (2), or (3):

1. Delusions
2. Hallucinations
3. Disorganized speech (e.g., frequent derailment or incoherence)
4. Grossly disorganized or catatonic behavior
5. Negative symptoms (i.e., diminished emotional expression or avolition)

B. For a significant portion of the time since the onset of the disturbance, level of functioning in one or more major areas, such as work, interpersonal relations, or self-care, is markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, there is failure to achieve expected level of interpersonal, academic, or occupational functioning).

- C. Continuous signs of the disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet Criterion A (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or by two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

- D. Schizoaffective disorder and depressive or bipolar disorder with psychotic features have been ruled out because either 1) no major depressive or manic episodes have occurred concurrently with the active-phase symptoms, or 2) if mood episodes have occurred during active-phase symptoms, they have been present for a minority of the total duration of the active and residual periods of the illness.

- E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.
- F. If there is a history of autism spectrum disorder or a communication disorder of childhood onset, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations, in addition to the other required symptoms of schizophrenia, are also present for at least 1 month (or less if successfully treated).
- Specifiers:
  - First episode, currently in acute episode
  - First episode, currently in partial
  - Multiple episodes, currently in acute episode
  - Multiple episodes, currently in full remission
  - Continuous
  - Unspecified
  - With catatonia

Versus Schizoaffective Disorder

- A. An uninterrupted period of illness during which there is a major mood episode (major depressive or manic) concurrent with Criterion A of schizophrenia. Note: The major depressive episode must include Criterion A1 : Depressed mood.

- B. Delusions or hallucinations for 2 or more weeks in the absence of a major mood episode (depressive or manic) during the lifetime duration of the illness.

- C. Symptoms that meet criteria for a major mood episode are present for the majority of the total duration of the active and residual portions of the illness.

- D. The disturbance is not attributable to the effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

Other Differentials

- *Mood Disorder With Psychotic Features*
- *Brief Psychotic Disorder*
- *Delusional Disorder*
- *Substance-Induced Psychotic Disorder*
- *Schizophreniform Disorder*
- *Schizotypal Personality Disorder*

- The boundaries between these can be so unclear that many scholars have argued for the removal of separate diagnostic categories.

THEORETICAL PERSPECTIVES

- Psychodynamic Perspective
  - Primary Narcissism
  - Harry Stack Sullivan
  - Mother-Child Relationships

- Learning Perspective
  - Ulmann and Krasner
    - Reinforcement for behaving in a manner consistent with Sz.
      - Secondary gains: Inadvertent reinforcement of bizarre behaviour
      - Haughton and Ayllon (1965): Broom case

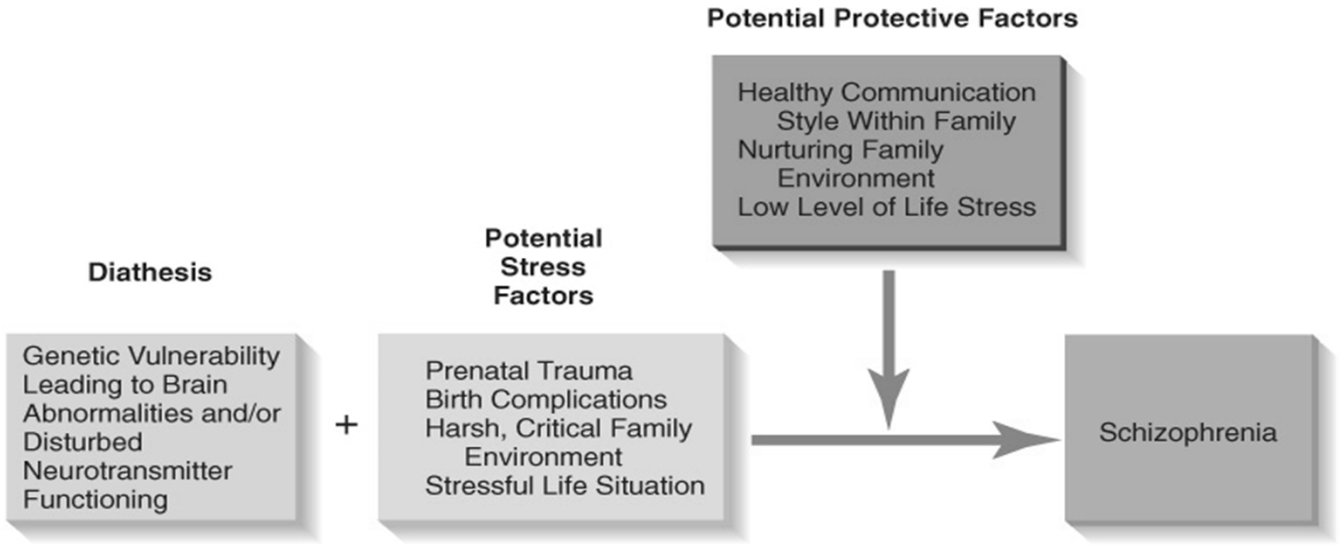
THEORETICAL PERSPECTIVES

Biological Perspective

- Genetic Factors
  - Cross-fostering studies
- Biochemical Factors
  - Dopamine theory
  - Neuroleptic drugs
- Viral Infections
- Brain Abnormalities
  - Hippocampus
  - Amygdala

THEORETICAL PERSPECTIVES

FIGURE 10.3 Diathesis-stress model of schizophrenia.



TYING IT TOGETHER

Tying It Together

- Diathesis-Stress Model
- Research Evidence Supporting the Diathesis-Stress Model
  - Acute stress tends to predict onset
  - People with COMT gene more likely to develop psychosis with cannabis
  - Genetic liability

TREATMENT & THEORETICAL PERSPECTIVES

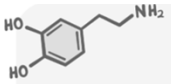
Family Theories

- Schizophrenogenic Mother
  - Cold, aloof, withholding affection.
  - Child withdraws, foreclosing on opportunities to socialize.
  - Retreats into a fantasy world and begins to behave according to that imagined environment
- Excessive levels of expressed emotion (hostility toward patient)
- Double-bind communications theory
  - Children being shaped to say what they think parents “want” to hear.
  - Incompatible with true feelings
- Communication Deviance
  - Mimicing unclear, vague, communications modelled by other esp parents
- Expressed Emotion
- Family Factors: Causes or Sources of Stress?

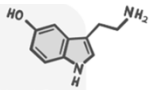
TREATMENT & THEORETICAL PERSPECTIVES

Biological Approaches

- Antipsychotic Drugs
  - Phenothiazines; Haloperidol
    - Tardive Dyskinesia (TD)
  - Atypical antipsychotics
    - Agranulocytosis
- Sociocultural Factors in Treatment

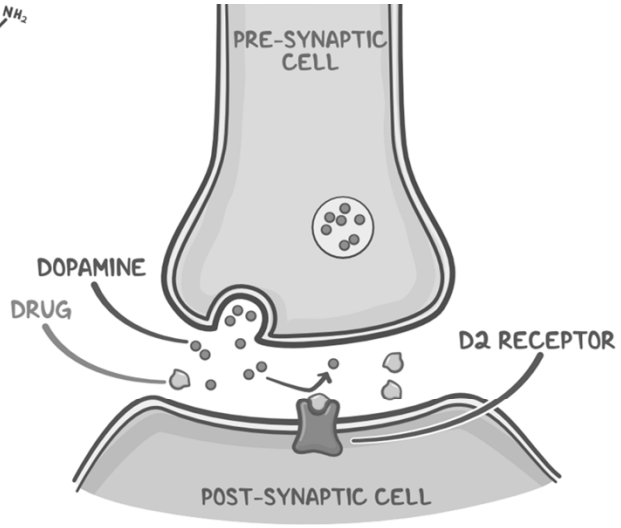


BACKGROUND



* BLOCK **DOPAMINE** RECEPTORS & SOMETIMES **SEROTONIN** RECEPTORS in NERVOUS SYSTEM
* **DOPAMINE** can AFFECT **FOUR PATHWAYS:**
  ~ MESOLIMBIC, MESOCORTICAL, NIGROSTRIATAL, & TUBEROINFUNDIBULAR
* MANAGE MENTAL ILLNESSES SUCH as SCHIZOPHRENIA & BIPOLAR DISORDER, as WELL as PSYCHOSIS

* **POSITIVE SYMPTOMS** of PSYCHOSIS
  ↳ HALLUCINATION, DELUSION, & DISORGANIZED THOUGHT
* **NEGATIVE SYMPTOMS** of PSYCHOSIS
  ↳ LACK of EMOTIONALITY, SOCIAL WITHDRAWAL, & LACK of MOTIVATION



CLASSES

* **TYPICAL (1st GENERATION)**
  ~ HIGH or LOW POTENCY ⟶ AMOUNT of DRUG REQUIRED to MINIMIZE SYMPTOMS
  ~ NOT SELECTIVE TO D2 RECEPTORS in MESOLIMBIC PATHWAY ⟶ WORSENING NEGATIVE SYMPTOMS
* **ATYPICAL (2nd GENERATION)**
  ~ BLOCK BOTH D2 RECEPTORS & SEROTONIN 5-HT2A RECEPTORS ⟶ ↓↓ NEGATIVE SYMPTOMS

SIDE EFFECTS

* **HIGH-POTENCY, 1ST GENERATION**
  ~ EXTRAPYRAMIDAL SYMPTOMS
  ~ TARDIVE DYSKINESIA
  ~ NEUROLEPTIC MALIGNANT SYNDROME

* **LOW-POTENCY, 1ST GENERATION**
  ~ DRY MOUTH
  ~ CONSTIPATION
  ~ SEDATION
  ~ DIZZINESS

* **2nd GENERATION**
  ~ WEIGHT GAIN
  ~ DRUG-INDUCED TYPE 2 DIABETES
  ~ TIREDNESS

TREATMENT & THEORETICAL PERSPECTIVES

Psychoanalytic Approaches

- Personal therapy
- Freud was of the opinion that psychoanalysis was not helpful in the treatment of Sz

TREATMENT & THEORETICAL PERSPECTIVES

Learning-Based Approaches

- Social Skills Training
  - Lots of evidence speaking to social maladjustment
  - Social rejection and lack of support worsen outcomes

Psychosocial Rehabilitation

- Focuses on functional practical adaptation
  - Public transportation
  - Job skills (often in a sheltered environment)
  - Appointment of a public guardian/trustee

Family Intervention Programs

- Education
- Early intervention is critical