

# Schizophrenia Spectrum and Other Psychotic Disorders

- MUST cause clinically significant distress or impairment in social, occupational, or other areas of functioning
- Disruptions tend to occur across domains of
  - Sensation – visual, auditory, tactile, olfactory
  - Cognition/Perception – meaning attributed to sensory disturbances tend to be bizarre, odd, or disturbing
  - Motivation – loss of will, ability to direct self
  - Emotion/affect – nearly absent, can be flat
  - Behavior – odd, disorganized, including speech

# Schizophrenia – Symptoms (1 of 4)

- A. Presence of two (or more) of the following, one of which must be 1., 2., or 3.:
  - 1. Delusions.
  - 2. Hallucinations.
  - 3. Disorganized speech (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 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).

# Schizophrenia - Symptoms (2 of 4)

- 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 period of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two of 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.

# Schizophrenia - Symptoms (3 of 4)

- D. The disturbance is not attributable to the physiological effects of a substance or another medical condition.
  
- E. 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).

# Schizophrenia – Specifiers (4 of 4)

Specifiers are ONLY to be used AFTER the disorder has been present for more than 1 year:

- First Episode, Currently in Acute Episode
- First Episode, Currently in Partial Remission
- First Episode, Currently in Full Remission
- Multiple Episodes, Currently in Acute Episode
- Multiple Episodes, Currently in Partial Remission
- Multiple Episodes, Currently in Full Remission
- Continuous
- Unspecified
- With Catatonia

# Schizophrenia – Prevalence, etc.

## Prevalence

lifetime: approximately 0.3-0.7%, with some variability across race/ethnicity and geographic origin for immigrants

## Gender

about even, though some studies show M slightly higher than F

## Onset

for males: 19-29

for females: 22-35

childhood instances occur, but very rare

Late onset – associated more with women, better occupational history, greater frequency of being married, more likely to present with positive psychotic symptoms and less negative and disorganized symptoms, typically has better prognosis

# Schizophrenia – Course

Tends to be chronic and persistent, particularly if onset is insidious

- starts with prodromal phase with gradual development of symptoms starts with some bizarre-ness that persists, followed by decreasing functionality, emergence of psychotic symptoms
- can have variability in course, with some mild remittance and return

Greatest functional deterioration occurs during first 5-10 years

- can plateau and even improve but full return to pre-morbid levels unlikely

Good vs. poor prognosis

- Late vs. early onset
- Good premorbid social, relational, and work history vs. poor
- precipitating factors vs. none
- acute vs. insidious onset
- positive symptoms vs. disorganized or negative symptoms

About 20% of patients with Schizophrenia attempt suicide, about 5% successfully commit suicide – associated with depression, not solely psychotic symptoms. Most likely to be young men of high intelligence.

# Schizophrenia – Comorbidity

## Substance Abuse

- 47.3% of individuals with Schizophrenia have met criteria for substance abuse at some point in their lives (Audrey, 1992)
- 50-90% of individuals w/ Schizophrenia smoke (Jeste et al., 1996)
- 10-over 65% comorbid alcohol abuse depending on study (Mueser, Bellack, & Blanchard, 1992). High end is probably homeless population vs. low end on units.
- Individuals with both disorder have greater risk of violence

Violence – 6% of individuals with Schizophrenia have history of violent act, 37% had comorbid alcohol abuse (Lindqvist & Allebeck, 1990)

Depression – both as a symptom of Schizoaffective Disorder and also in response to being diagnosed with Schizophrenia

## Mental Retardation/Cognitive Impairment

- Individuals with MR less likely to be able to describe presence of a thought disorder or positive symptoms
- Some individuals with chronic Schizophrenia have progressive cognitive deterioration (Nair et al., 1997)

# Schizophrenia – Lifetime Risk

(Average, from Gottesman, 1991)

General Population	1%
Spouses of Schizophrenics	2%
First cousins (3 relatives – 12.5% of genes shared)	2%
Nephews/Nieces (2 relatives – 25% of genes sh.)	4%
Grandchildren	5%
Half-siblings	6%
Children (1 relatives – 50% of genes shared)	13%
Siblings	9%
Siblings with a Schizophrenic parent	17%
Dizygotic twins	17%
Parents	6%
Monozygotic twins	48%
Offspring of 2 Schizophrenic parents	46%

# Schizophrenia – Etiology

Environmental model (Systemic factors)

- Epidemiological studies showed that African-Americans (“Black”) were more likely to be diagnosed with Schizophrenia than whites
- Faris & Warren (1939) showed admission rates for Schizophrenia was 102/100K in Chicago slums vs. 2/100K in wealthy suburbs
- Confound with SES?

# Schizophrenia – Etiology

## Diathesis-Stress models

### - Adoption studies

Tienari (1991) studied Finnish sibling children of Schizophrenic mothers who were raised by non-Schizophrenic parents and found that 0% of 43 sibling-pairs, placed in relatively normal adoptive homes, were diagnosed with Schizophrenia compared to 38% of 39 sibling-pairs, placed in disturbed adoptive homes, who eventually developed Schizophrenia

- Mosher (1989) found that hospitalization rates for Schizophrenia in U.S. were highest in 1960-1961, 5 years after effective neuroleptics were widely available. However, in 1963, when Community Mental Health Centers Act was passed and SSI benefits were extended to young and mentally disabled, hospitalization rates declined dramatically. In contrast, in Western European countries where social/government benefits were already provided for young mentally ill, there was no similar notable decline in hospitalization.

# Schizophrenia - Etiology

Diathesis–Stress model (cont.)

- Emotional Expression (EE)

- Vaughn & Leff (1976) examined relapse rates of 128 patients with Schizophrenia post-hospital discharge

- 3 variables: 1. medication compliant

2. low vs. high levels of EE in home

3. for high EE, how many hours of face-to-face contact with relatives

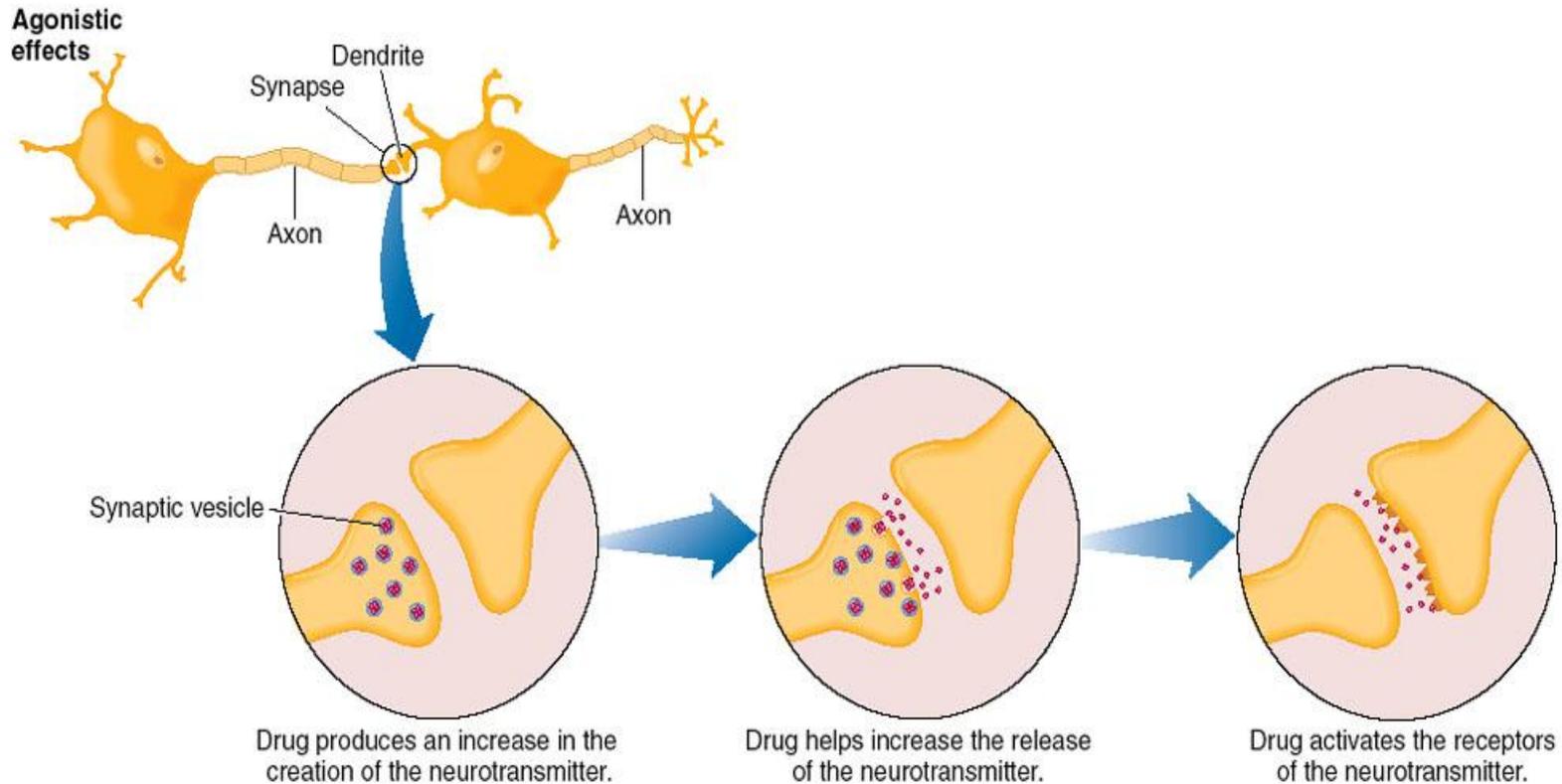
<i>EE</i>	<i>Hours</i>	<i>Medicated</i>	<i>Relapse rate</i>
Low (13%)		Yes	12%
		No	15%
High (51%)	<35 (28%)	Yes	15%
		No	42%
	>35 (69%)	Yes	53%
		No	92%

# Schizophrenia - Etiology

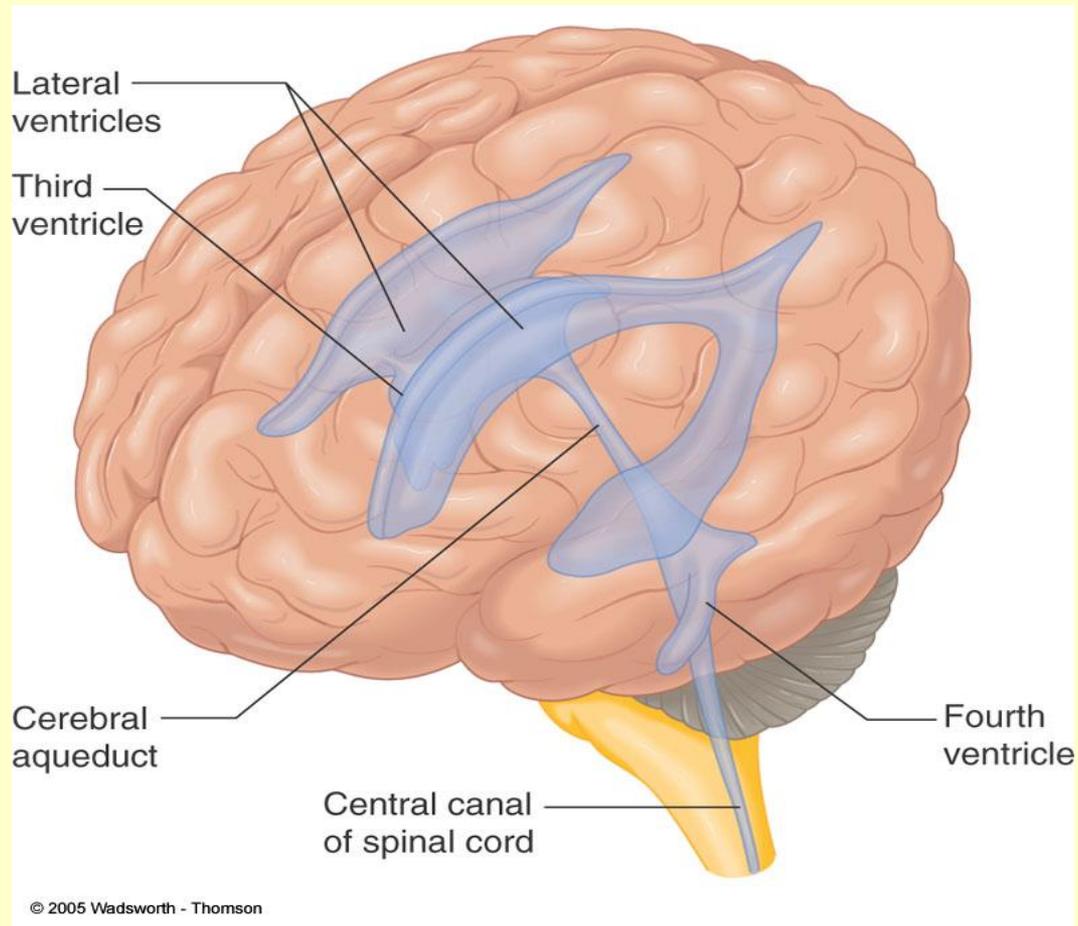
## Neurophysiology

- John et al. (1994) many Schizophrenics have abnormal EEG activity
- Different metabolism and blood flow to prefrontal cortex (McKenna, 1994)
- Stevens (1997) found increased size of Third Ventricles for 15-30% of individuals with Schizophrenia
- Dopamine Hypothesis - individuals taking amphetamines, which act on dopamine receptors, experience Criterion A symptoms (hallucinations and delusions)

# Schizophrenia – Dopamine Hypothesis



# Schizophrenia – Ventricular/Brain Ratio



# Schizophrenia - Etiology

## Pathophysiology

- Malnutrition during first trimester in utero – associated with higher risk of developing Schizophrenia (Susser & Lin, 1992) and Schizophrenia-spectrum personality disorders (Schizoid, Schizotypal)
- Patients with Schizophrenia had higher instances of maternal infection of influenza during second trimester (Mednick, Machon, Huttunen, & Bonett, 1988; Barr, Mednick, & Munk-Jorgensen, 1990)
- Syphilis

# Schizophrenia - Etiology

## Psychospiritual

- Brokenness resulting from the fall that may simultaneously testify of the sufficiency of God's grace in living a productive life and also of our reliance on His grace that we are not broken in a similar manner
- possibly demonic possession
- need to differentiate this from demonic oppression and the effects of this on functioning
- Schizophrenia vs. Brief Psychotic Disorder (or any other Psychotic Disorder or disorder with Psychotic Features)

# Schizophrenia - Treatment

- Biological Treatment
  - Medication – Neuroleptic/Antipsychotic meds: Risperdal, Zyprexa, Clozaril
  - More effective in treating positive than negative symptoms
- Therapy Alone
  - Controlled study in 1981 (Karon & Vandebos) showed better outcome (e.g., readmission) for patients with Schizophrenia treated by highly experienced therapists with specialized individual therapy vs. by antipsychotic medication alone.
  - Behavioral approaches focus on the use of token economies and positive reinforcements of desired and pro-social behaviors (Paul & Lentz, 1977, showed 11% achieving wholly independent functioning for at least 4.5 years and 96% managed to reside in community for at least 90 days.

# Schizophrenia - Treatment

- Community Treatment
  - Structured environment (i.e., residential programs) can facilitate independent to semi-independent living
  - In 2004, there were 100,439 psychiatric beds in all U.S. hospitals, working out to 1 bed per 3,000 people. In 1955, it was 1 for every 300.
  - Deinstitutionalization has resulted in increased populations of mentally ill in prisons to 16.6% (14.5 men, 31.0 women; Steadman, Osher, Robbins et al., 2009)
- Spiritual Treatment
  - Deliverance only when certain that the etiology is spiritual OTHERWISE the treatment can be incorporated into the delusion, with symptom exacerbation, and possible revocation of counseling license (regarded as unethical treatment)

# Schizophrenia - Treatment

- Integrative Treatment
  - Modern formulation is that therapy alone is not effective in preventing psychosis and that this approach without medication is generally regarded as unethical
  - Meds to control positive symptoms
  - Therapy recommended to address distress from symptoms (i.e., paranoia, hallucinations) through more adaptive interpretation of symptoms and to provide emotional support
  - Prayer and meditation on God's word and promises can help to address distress from symptoms
  - Family therapy can be helpful to address EE and decrease negative family reactions to patient

# Schizophreniform Disorder

Viewed as a pre-Schizophrenia diagnosis.

Criterion A symptoms of Schizophrenia have been met for at least 1 month, but does not meet 6-month duration requirement. Also, may not meet the requirement of social/occupational dysfunction. If dysfunction starts to present and disturbance is ongoing, diagnosis is changed to Schizophrenia after 6 months.

If disturbance remits without significant decrease in functioning, Schizophrenia is not diagnosed. If the diagnosis is given anytime prior to the 6-month mark and recovery period has not elapsed, “Provisional” qualifier is given:

295.40 Schizophreniform Disorder, Provisional

Specifiers:

- With Good Prognostic Features – acute onset; confusion at height of psychotic symptoms; good premorbid social, interpersonal, occupational functioning; absence of negative symptoms
- Without Good Prognostic Features
- With Catatonia

# Schizoaffective Disorder (1 of 2)

- A. An uninterrupted period of illness during which there is a major mood episode (Major Depressive or Manic) concurrent with symptoms that meet Criterion A for Schizophrenia.
- B. Delusions or hallucinations for 2 weeks or more weeks in the absence of a major mood episode (Major 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 periods of the illness.
- D. The disturbance is not attributable to the physiological effects of a substance or another medical condition.

# Schizoaffective Disorder (2 of 2)

## Specifiers:

- Bipolar Type
- Depressive Type
  
- Episode specifiers (First or Multiple)
- Phase specifiers (Currently Acute, Currently in Partial Remission, Currently in Full Remission)
- Continuous
- Unspecified
- With Catatonia

# Delusional Disorder (1 of 3)

- A. The presence of one (or more) delusions with a duration of 1 month or longer. (delusions tend to be non-bizarre, that is that they are realistically plausible but highly unlikely – see Criterion B below)
- B. Criterion A for Schizophrenia has never been met.

Note: Hallucinations, if present, are not prominent and are related to the delusional theme (e.g., the sensation of being infested with insects associated with delusions of infestation)

- C. Apart from the impact of the delusion(s) or its ramifications, functioning is not markedly impaired and behavior is not obviously bizarre or odd.
- D. If manic or major depressive episodes have occurred, these have been brief relative to the duration of the delusional periods.
- E. The episode is not attributable to the physiological effects of a substance or another medical condition and is not better explained by another mental disorder, such as Body Dysmorphic Disorder or Obsessive-Compulsive Disorder.

# Delusional Disorder (2 of 3) – Types (need to be specified)

1. Erotomanic Type – delusions that another person is in love with the individual
2. Grandiose Type - delusions of having some great, but unrecognized, talent or insight, or having made an important discovery (old definition: having inflated worth, power, knowledge, identity, or special relationships to a deity or famous person)
3. Jealous Type - delusions that the individual's sexual partner is unfaithful
4. Persecutory Type - delusions that the person (or someone to whom the person is close) is being malevolently treated in some way (conspired against, cheated, spied upon, followed, poisoned or drugged, maliciously maligned, harassed, or obstructed in the pursuit of long-term goals)
5. Somatic Type - delusions involving bodily functions or sensations
6. Mixed Type - delusions characteristic of more than one of the above types but no one theme predominates
7. Unspecified Type – when delusions cannot be described by the above

# Delusional Disorder (3 of 3)

Other specifiers:

- With Bizarre Content

- Which Episode x Status:

  - First Episode, Currently in Acute Episode

  - First Episode, Currently in Partial Remission

  - First Episode, Currently in Full Remission

  - Multiple Episodes, Currently in Acute Episode

  - Multiple Episode, Currently in Partial Remission

  - Multiple Episode, Currently in Full Remission

  - Continuous

  - Unspecified

1-year Prevalence is rare: ~ 0.2% (compared with Schizophrenia 0.3-0.77%) and incidence is equivalent across gender. Generally, individuals with Delusional Disorder are more functional.

# Delusional Disorder

Challenging to diagnose because delusions may have a basis in reality.

- The situation may be real, despite implausibility
- Although not proven yet, the belief may be true
- Cultural beliefs may be appropriate but unfamiliar and unknown to clinician

Oltmanns (1988)

1. Consideration of all the evidence leads most people to consider the belief incredible
2. The belief is not shared by others
3. The belief is unshakeable and alternative explanations are not considered potentially acceptable
4. There is preoccupation with the belief
5. The belief involves personal reference vs. unconventional conviction
6. No effort to resist the belief
7. The belief causes distress and/or impairment

# Brief Psychotic Disorder (1 of 2)

- A. Presence of one (or more) of the following, one of which must be (1), (2), or (3).:
1. Delusions
  2. Hallucinations
  3. Disorganized speech (frequent derailment or incoherence)
  4. Grossly disorganized or catatonic behavior
- B. Criterion A symptoms have been met for at least 1 day, but for less than 1 month, with **EVENTUAL FULL** return to premorbid levels of functioning.
- C. The disturbance is not better explained by Major Depressive or Bipolar Disorder with Psychotic Features or another psychotic disorder such as Schizophrenia or Catatonia, and is not attributable to the physiological effects of a substance or another medical condition.

Note in DSM-IV-TR: Do not diagnose this if symptoms are reflective of culturally sanctioned responses (e.g., seeing a vision of a recently lost loved one).

# Brief Psychotic Disorder (2 of 2)

Specifiers:

- With Marked Stressor
- Without Marked Stressor
- With Postpartum Onset (within 4 weeks postpartum)
- With Catatonia

# Catatonia Associated With Another Mental Disorder

- A. The clinical picture is dominated by a minimum of THREE of the following symptoms:
1. Stupor
  2. Catalepsy
  3. Waxy flexibility
  4. Mutism (pre-existing Aphasia is ruled out)
  5. Negativism
  6. Posturing
  7. Mannerism
  8. Stereotypy
  9. Agitation, not influenced by external stimuli
  10. Grimacing
  11. Echolalia
  12. Echopraxia

# Substance/Medication-Induced Psychotic Disorder

Diagnosis is given when psychotic symptoms emerge as a direct or side effect of an ingested substance:

e.g., Paranoid beliefs from long-term sustained marijuana use that persist even when use ceases.

e.g., Hallucinations as a rare side-effect of certain medications

# Psychotic Disorder due to Another Medical Condition

Syphilis

Dementia, Alzheimer's Type

Other Specified Schizophrenia  
Spectrum and Other Psychotic  
Disorder

Unspecified Schizophrenia Spectrum  
and Other Psychotic Disorder