### Negative Symptoms

- **Loss of normal functioning**
  - window on thoughts?

- **Symptom types**
  - Affective flattening
  - Alogia: poverty of speech
  - Anhedonia: absence of pleasure
  - Avolition: inability to initiate or persist in activities

### Disorganized Symptoms

#### Disorganized Speech
- “loose” associations
- Clanging
- Word salad

#### Disorganized Behaviors
- bizarre, silly behaviors
- anger and physical aggression

#### Catatonic behaviors
- marked decrease in responsivity to the environment
- Stupor: complete lack of awareness
- Rigidity: actively refuse to be moved
- Excitement: bizarre, repetitive motor activity

### Key DSM-IV Criteria

- **Symptoms**
  - two or more of the following
    - delusions
    - hallucinations
    - disorganized speech
    - disorganized/catatonic behavior
    - negative symptoms

- **Social/occupational dysfunction**
- **Continuous signs for at least 6 months**
  - 1 month of active symptoms
- **Not due to the effects of a substance**

### Subtypes of Schizophrenia

- **Paranoid**
  - Delusions
  - Absence of disorganized speech/behavior
- **Disorganized**
  - Disorganized speech / behavior
  - Affect disruption
- **Catatonic** - at least two of:
  - Stupor
  - Excessive motor activity
  - Extreme negativism
  - Peculiar voluntary movement
- **Undifferentiated**
  - Do not fall in any other subtype category
- **Residual**

### Other Psychotic Disorders

- **Schizophreniform Disorder**
  - milder form
  - less impairment

- **Schizoaffective Disorder**
  - also exhibit features of a mood disorder
  - Affect disruption prominent
  - Similar impairments

- **Delusional Disorder**
  - Specific, chronic delusions
  - Persecution most common
  - No other features of schizophrenia

- **Brief Psychotic Disorder**
  - One or more positive symptoms
  - Lasts less than a month, regain normal functioning
  - Stress

### Descriptive Statistics

- **Prevalence**
  - 1%
- **Onset**
  - late teens to 30s
  - Early onset = greater severity
- **Gender differences**
  - 1:1 ratio
  - Less severe in females
- **Cultural factors**
Average risk for developing schizophrenia in relatives of individuals with schizophrenia

<table>
<thead>
<tr>
<th>Relation to proband</th>
<th>% with schizophrenia</th>
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<tbody>
<tr>
<td>Base Rate</td>
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<tr>
<td>Spouse</td>
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<td>Half-sibling</td>
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<td>DZ twins</td>
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Genes that may play a role
- Dopamine receptor genes
- Serotonin receptor genes
- Nicotinic receptor genes
- Other chromosomal regions have been linked (at least 10)

Environmental influences
- Prenatal influenza
  - 1957: 4-5 week flu epidemic in Finland
  - 4 groups of mothers
    - 1st trimester during epidemic
    - 2nd trimester during epidemic
    - 3rd trimester during epidemic
    - Pregnant at the same time in other years
- Maternal Malnutrition
  - Ireland study during WWII
  - First trimester risk