Chapter 9

Schizophrenia and related disorders
1. When you think of someone being “crazy” what does that look like?
Nature and Definition

http://www.alonzo.org/images/crazy%20aint%20crazy%203.jpg
The Nature of Schizophrenia

• Schizophrenia is a disorder of thinking and troubled mood.
• It is manifested by difficulties in maintaining and focusing attention and in forming concepts.
• It can result in false perceptions and beliefs, in enormous difficulties in understanding reality, and in corresponding difficulties with language and emotional expression.
Schizophrenia

A disorder with a range of psychotic symptoms involving disturbances in content of thought, form of thought, perception, affect, sense of self, motivation, behavior, and interpersonal functioning.
Bleuler coined the term *schizophrenia*. The four fundamental features are still referred to as *Bleuler’s Four A’s*:

- **Association** (thought disorder)
- **Affect** (emotional disturbance)
- **Ambivalence** (inability to make or follow through on decisions)
- **Autism** (idiosyncratic style of egocentric thought and behavior)
Schizophrenia

A disorder with a range of psychotic symptoms involving disturbances in content of thought, form of thought, perception, sense of self, motivation, behavior, and interpersonal functioning.

Psychosis

Behavior involving loss of contact with reality.
Psychosis

- An impairment in reality testing
- Difficulty thinking coherently
- Difficulty speaking coherently
- Distracted
- Tormented by vivid images or voices
Schizophrenic Disorder Raving Maniacs?

• They are often withdrawn and preoccupied with their own problems.

• Sometimes they yell and scream and occasionally strike someone.

• It is unclear if this is due to their problem or the way they are treated.
Persons with Schizophrenic Disorder
Always Disturbed?

- Often a single episode will occur and disappear never to reoccur.
DSM-IV Definition of Schizophrenic Disorder

• Symptoms must last for 6 months
• Symptoms must be marked deterioration from previous levels of functioning
  – at work, social, self-care
• Gross impairment of reality testing
• Several psychological processes must be affected:
  – thought perception, emotion, communication, psychomotor behavior
PHASES OF SCHIZOPHRENIA

- Prodromal
- Active
- Residual
Prodromal Phase Of Schizophrenia

- Progressive deterioration in
- Social and interpersonal functioning
- Social withdrawal
- Inability to work productively
- Eccentricity
- Poor grooming
- Inappropriate emotionality
- Peculiar thought and speech
- Unusual beliefs
- Odd perceptual experiences
- Decreased energy and initiative
Active Phase Of Schizophrenia

• Delusions
• Hallucinations
• Disorganized speech
• Disturbed behavior
• Negative symptoms
  – speechlessness
  – lack of initiative
Residual Phase Of Schizophrenia

• Similar to Prodromal Phase
2. Have you ever seen or heard something that is not there? What did you think you had perceived?
Symptoms

http://www.stanford.edu/class/humbio103/ParaSites2005/Coenurosis/symptoms.jpg
SYMPTOMS

Disturbances can be seen in . . .

- Perception
  - Hallucinations
- Thoughts
  - Lack cohesiveness and logic
- Language
  - Incomprehensibility
- Behavior
  - Odd and disturbing

http://www.pipelinenews.org/readerimages/voices.gif
3. Do you know someone who believes something that no one else believes is true? What is it that they believe?
Schizophrenia Symptoms

- Disturbed thinking
- Perceptions
- Affect
- Sense of self
- Motivation
- Behavior
- Interpersonal functioning

- Delusions
- Hallucinations
- Disorganized speech
- Disturbed or catatonic behavior
- Negative symptoms
  - Flat affect
  - No motivation

- Disruption of work, relationships self care.
Delusions vs. Hallucinations

- False beliefs that resist all argument
- A private theory, deeply held that often persists despite contradictory evidence
- Often does not fit with in individual’s level of knowledge or cultural group

- False sensory perceptions that have a compelling sense of reality
- Even in the absence of external stimuli that ordinarily provoke such perceptions
### Positive Symptoms

- Exaggerations or distortions of normal thoughts, emotions, and behavior.

### Negative Symptoms

- Symptoms that involve functioning below the level of normal behavior.
Symptoms

• Positive
  – **Delusions**: Beliefs that are grossly out of touch with reality.
  – **Hallucinations**: A false perception not corresponding to the objective stimuli present in the environment.

• Negative
  – **Alogia**: Speechlessness or a notable lack of spontaneity or responsiveness in conversation.
  – **Avolition**: Lack of initiative and unwillingness to act.
  – **Affective flattening**: A symptom of schizophrenia in which an individual seems unresponsive and which is reflected in relatively motionless body language and facial reactions, as well as minimal eye contact.
  – **Anhedonia**: A loss of interest in or ability to experience pleasure from activities that most people find appealing.
Acute and chronic schizophrenia

- Acute schizophrenics are characterized by rapid and sudden onset of very florid symptoms.
- Chronic schizophrenics seem to manifest a rather gradual and prolonged history of withdrawal.
Types of Schizophrenia

- Paranoid
- Disorganized
- Catatonic
- Residual
- Undifferentiated
Paranoid Schizophrenia

- Characterized by preoccupation with one or more bizarre delusions, or with auditory hallucinations that are related to a particular theme of being persecuted or harassed.
- They seldom display
  - severely disorganized behavior
  - disorganized speech
    - incoherence
    - loose associations
- Flat affect or inappropriate emotion
- They are formal or quite intense
Disorganized Schizophrenia

• Formerly hebephrenic
• Characterized by a combination of symptoms, including disorganized speech and behavior and flat or inappropriate affect.
• Silliness and incoherence
• Disorganized hallucinations and delusions
• Disregard bathing and grooming
• Eat their own body products
Catatonic Type

- Characterized by at least two bodily movement abnormalities:
  - Motor immobility or stupor.
  - Purposeless motor activity.
  - Mutism or extreme negation.
  - Peculiarities of movement or odd mannerisms and grimacing.
  - Echolalia or echopraxia.

http://www.minddisorders.com/images/gemd_01_img0029.jpg
Catatonic Schizophrenia vs. Other Types

• The salient feature motor behavior
• Enormously excited
• Strikingly frozen
• May occasionally alternate between the two
• Statuesque "waxy flexibility" is characteristic

http://www.ultradepth.com/Depth%203.jpg
Residual Type

• Applies to people previously diagnosed as schizophrenic if they no longer show prominent psychotic symptoms but still show lingering signs of the disorder.
Undifferentiated Type

• Characterized by a complex of schizophrenic symptoms that does not meet the criteria for other types of schizophrenia.
Dimensions Of Schizophrenia

Alternate three-factor model:

1. Psychotic
2. Negative
3. Disorganized

http://www.geocities.com/~jlhagan/lessons/images/per4a.gif
Type 1 Schizophrenia

- Sudden onset
- Delusions
- Hallucinations
- Prominent thought disorder
- "Positive symptoms" because they reflect marked departures from ordinary cognition.
Type II Schizophrenia

- flat affect
- poverty of speech
- loss of volition.
- "negative symptoms" are more difficult to define because they reflect the absence or diminution of normal everyday functions.
- They seem much more difficult to reverse
- are closely associated with poor long-term outcome.

http://web.lemoyne.edu/~hevern/psy340/lectures/psy340.15.3.schizophrenia.html
Courses Of Schizophrenia

- Continuous
- Recurring episodes
- Single episode
Factors Associated With More Favorable Prognosis

- Good premorbid functioning
- Acute onset
- Later age at onset
- Good insight
- Being female
- Consistent in medication usage
- Brief active-phase symptoms
- Good functioning between episodes
- Absence of structural brain abnormalities
- Normal neurological functioning
- No family history of schizophrenia
Other Psychotic Disorders

- Brief psychotic disorder
- Schizophreniform disorder
- Schizoaffective disorder
- Delusional disorders
- Shared psychotic disorder
The schizophrenia-like disorders share three features:

1. Serious break with reality.
2. Not caused by cognitive impairment.
3. Not primarily affective.
Brief Psychotic Disorder

- **with** marked stressor(s),
- **without** marked stressor(s), or
- **with postpartum** onset

A disorder characterized by the sudden onset of psychotic symptoms that are limited to a period of less than a month.
Schizophreniform Disorder

A disorder with essentially the same symptoms as schizophrenia, but lasts less than 6 months (and more than 1).
Schizoaffective Disorder

Schizophrenia with co-occurring mood disorder.
Delusional Disorders Types

• People with delusional disorders have a single striking psychotic symptom: an organized system of nonbizarre false beliefs.
  – **Erotomanic** another person is deeply in love with them.
  – **Jealous** one’s sexual partner is unfaithful.
4. When does jealousy become excessive?
5 Types of Delusions

- **Grandeur**: that one is especially important
- **Control**: that one’s thoughts or behavior are controlled from without
- **Persecution**: that some person group or government is out to get the person.
- **Reference**: that the remarks or behavior of other people refer to you
- **Somatic**: an unverified belief that something is wrong with one’s body
Shared Psychotic Disorder

In shared psychotic disorder, the person develops a delusional system as a result of a close relationship with a psychotic person who is delusional.

Intervention calls for:

• Separating them.
• Focusing on personal issues related to this person’s vulnerability to being dominated.
• Bolstering the client’s self-esteem.
Cognitive Deficits
3 Type Of Problems in Disordered Thought Processes

- Attentional deficits
- Over-inclusiveness: the tendency to form concepts from both relevant and irrelevant information
- Cognitive distractibility

http://www.funnyjokepics.com/funnypics/d188b5ec21267fb486a8e2f1d50cd372distracted.jpg
Clang associations

• Associating words by their sound rather than by their meaning
Neologisms

• New words that only have meaning to the person making up the word
Ideas of reference

• The belief that certain events and people have special significance.
Delusions As Normal Cognitive Activity

• You know your experience is real
• Other deny it
• If they are lying -- you feel persecuted
• If they are telling the truth -- you feel you have special abilities grandiosity
Schizophrenic Advantages

- Spontaneous
- Creative
- Unusual ability
- Superior capacity for creative thinking
Theories
Biological Theories

• Brain Structure And Function
  – Cortical atrophy
  – Reduced brain activation
  – Dopamine hypothesis

• Lines of evidence for dopamine hypothesis
  – Antipsychotic medications
  – Effects of drugs like amphetamines

• Biological stressors and vulnerability- prenatal experiences and birth complication
BIOLOGICAL THEORIES

• GENETICS: Concordance rate for identical twins is high – 90%! (64% if reared apart)
  – Family studies
  – Twin studies
  – Adoption studies
  – High-risk design
  – Search for biological markers
Biological Theories

**endophenotypes**

biobehavioral abnormalities linked to genetic and neurobiological causes of mental illness

In other words, they are

- heritable traits or characteristics that are not direct symptoms of the disorder but
- have been found to be associated.
Three measures of cognitive functioning stand out as particularly important in the search for biological markers:

- Sustained attention
- Smooth pursuit eye movements
- Antisaccade eye movements
Concordant & Discordant

• Two cases with the same diagnosis
• Two cases without the same diagnosis
Monozygotic & Dizygotic

- One egg and two eggs
Index case = Proband vs. Co-twin

- The first case seen
- The other twin
Adoption studies

• Separate out the effects of common child rearing situations
• From merely common genetics.
Biological basis of schizophrenia

- Higher dopamine receptor density
- Differences in brain structure.
Biological bases & two types

- Dopamine receptors seem to be indicated in Type I
- Brain structure in Type II.
## Dopamine hypothesis

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Amphetamine psychosis</th>
<th>Parkinson’s disease</th>
<th>Schizophrenia</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Symptom</strong></td>
<td>hallucinations</td>
<td>stiffness and tremors</td>
<td>disordered thought and behavior</td>
</tr>
<tr>
<td><strong>Drug</strong></td>
<td>neuroleptic</td>
<td>L-DOPA</td>
<td>phenothiazine (a neuroleptic)</td>
</tr>
<tr>
<td><strong>Action of dopamine</strong></td>
<td>decreases</td>
<td>increases</td>
<td>decreases</td>
</tr>
<tr>
<td><strong>Effect</strong></td>
<td>calms</td>
<td>reduces stiffness and tremors</td>
<td>calms disordered thought and behavior causes stiffness and tremor</td>
</tr>
</tbody>
</table>
Psychological Perspective

No credible theory proposes that schizophrenia develops exclusively as the result of psychological phenomena.
Psychological Perspective

No credible theory proposes that schizophrenia develops exclusively as the result of psychological phenomena. However, behavioral psychologists have found factors influencing whether the likelihood the schizophrenic individual will act in a “normal” way or not.

- Failure to learn important social cues.
- Lack of attention from others.
- Retreat into fantasy world.
- Behaviors become odd and eccentric.
- Being labeled as odd or schizophrenic.
- Hospitalization exacerbates maladaptive behaviors.
5. What kind of treatment makes it hardest for you to think straight?
Sociocultural Perspective

• Focuses on the family system
  – Faulty modes of behavior and communication
  – High degree of expressed emotion (hostile feelings, overinvolvement with each other)
  – Cognitive distortions

• Social class and income
  – Onset may be associated with environmental stressors of poverty
  – Contracting the disease leads to social and economic “downward drift”
Expressed emotion

- Refers to the ways in which emotions are expressed in the family.
- Criticism,
- Over-involvement,
- Hostility directed at the offspring,
- The offspring is more likely to develop the spectrum of symptoms associated with schizophrenia.
Criticism and expressed emotion on at risk children

• Increases in criticism hostility and expressed emotion
• Increase schizophrenic symptoms
• Decreases contribute to remission
Schizophrenia and social class

- Eight times as high in the lower class as it is in the middle or upper classes.
- Social class is the cause & result of schizophrenia
- Low social class seems to push people into schizophrenia faster
- It also seems where schizophrenics end up
Best outcome predictors

- First decade after the episode—premorbid functioning
- Individual's capacity to cope with his or her life stresses
- Second decade, family functioning was as important as premorbid coping.
- Long-term outcome—twenty or more years after the episode—was best predicted by family genetics.
Treatment
BIOLOGICAL TREATMENT

NEUROLEPTICS

• Vary in potency.
• All block dopamine receptors.
• Side effects:
  – Tardive dyskinesia
  – Compromise of immune system
Antipsychotic medication

• Lowest potency
  – chlorpromazine (thorazine)
  – thioridazine (mellaril)

• Middle level of potency
  – trifluoperazine (stelazine)
  – thiothixine (navane)

• Most potent
  – haloperidol (haldol)
  – fluphenazine (prolixin)

• Clozapine (clozaril)
Antipsychotic medication

- Have sedative effects,
- Ameliorate Type I symptoms,
- Do not affect guilt and depression.
- Have bad side effects,
  - Tardive dyskinesia (irreversible)
  - Compromise of immune system
- Many out of the hospital,
- Revolving door syndrome.

http://www.union-kilo.de/friedlander_revolving_door.jpg
Tardive dyskinesia

- A neurological disorder consisting of sucking, lip smacking, and tongue movements not reversible
- Occurs in 24% of people with 7 or more years of neuroleptic exposure
Problems other than Physiological

• Communication
• Self-esteem
• Psychological problems that antipsychotic drugs simply do not touch.
Psychosocial Treatment

• Psychological
  – Behavioral
  – Token economy
  – Social skills training
  – Cognitive-behavioral techniques

• Sociocultural
  – Milieu therapy
  – Family therapy

• Integrative approach - combine medication with psychosocial intervention
Milieu therapy

- Hospitals, which are not warehouses,
- but are designed to train patients in social communication, work, and in recreation.
Therapeutic community

• alternatives to hospitalization
• use nonprofessionals
Soteria House

- Community-based residential treatment center,
- It provided a home for people diagnosed as schizophrenics.
- The staff were selected for their ability to accept and relate to people undergoing an acute schizophrenic crisis.
- Schizophrenic episodes were viewed as valid, if often terrifying, experiences that have strong potential for individual growth and integration.
- Antipsychotic drugs were not provided at Soteria House, except in emergencies.
Soteria House

• Despite the near-absence of antipsychotic medications in the Soteria example, both groups manifested at the same degree of symptom remission.

• The intense interpersonal milieu at Soteria House effectively reduced the need for medications.

• Finally, 6 months after discharge, 60% of Soteria House's residents were able to live independently, while only 4% of the controls could live apart from their families.
Yellow Pill

http://www.ambafrance-us.org/culture/art/pix/suspuglas/yellow_pill_sm.jpg
The question raised by the story, The Yellow Pill.

• Is there an ultimate reality, constant and unchanging?
• Can the individual know that ultimate reality?
How a patient is labeled as crazy or schizophrenic?

• On the basis of this discrepancy between his conceptions and those of his patients, he can label his patients as crazy or schizophrenic.
R. D. Laing and Thomas Szasza’s view of diagnosis

- They see the therapist's diagnosis as a social value judgment.
Dr. Elton view of those who "take fantasy fiction too seriously."

- He puts them in the same category as people who burned women as witches and stoned men as devils.
The advice that Elton and Bocek want to give each other?

• "...we have to have at least one peg of rationality in all this madness or you will be cut completely adrift in this dream world you've cooked up."
The first person to suggest taking a yellow pill?

- Jerry Bocek
Did Dr. Cedric Elton cure Jerry Bocek.

- Jerry Bocek went out into space believing that he was going home cured.
Who took the yellow pill?

• Dr. Cedric Elton, alias Gar Castle
Who was Cedric Elton?

• The psychiatrist who examined Gar Castle when he got his pilot's license
From whose point of view the story was written?

- Gar Castle's
- (when he thought he was Cedric Elton)
Pair up the following terms:

- Dr. Cedric Elton
- 4 policemen
- Straight jacket
- Killed people
- Secretary

- Gar Castle
- 4 gear lockers
- Ropes
- Killed lizards
- Helena Fitzroy expediter at Moss(?) Fort.
1. When you think of someone being “crazy” what does that look like?