Psychological Disorders (mental illnesses): A Little History

What are psychological disorders?

What are some major classes of psychological disorders?

Through the ages, people suffering from psychological disorders have been ____________________________ (especially in the Western world - prisons, asylums, mental institutions, and hospitals, etc).

At the turn of the century (1890’s), ______ influenced the treatment of some psychological disorders with his theories of repression and conflict - thus, these psychologically-based disorders could be treated through ________________________________

In 1949, an Australian psychiatrist, ___________, reported significant improvements in ___________________________ with the drug lithium.

- he immediately tried lithium in ________________________________ _____________ and observed significant improvements in humans as well.
A few years later (1951), French psychiatrists Jean Delay and Pierre Deniker showed that the drug chlorpromazine (______________) successfully calmed psychotic episodes.

- this was followed in mid-1950’s by the introduction of several antipsychotic drugs (based on chlorpromazine)

- the late 1950’s also saw the introduction of the first classes of antidepressant drugs (______________________).

Introduction of these psychoactive drugs led to ______________ ________________________________________.

![Graph showing resident patients from 1900 to 1990 with a peak in 1956.](image)
Features of Psychological Disorders Diagnosis

What is a diagnosis?

Just like in medicine, a reliable system of psychiatric diagnosis is required before psychiatrists can understand and treat psychological disorders.

What are the goals of diagnosis?

1) 
2) 
3) 

Unlike many medical conditions however, psychological disorders, even if relatively similar, tend to be variable between individuals.

- this arises from the uniqueness of the human brain and mind.

What are some examples?
How is psychological illness distinguished from health?

An accepted distinction for “clinically significant mental illness” is ______________________________________________________
__________________________________________________________
_______.

- it is more than being simply “different”, “unusual” or “nonconformist”, without which ____________________________
______________________________________________________
.

Because of the inherent problems in recognizing psychological disorder symptoms, a list of _______________________ have been developed by experts:

- these have been grouped into the __________________________
________ now in its fourth edition (DSM-IV), and being continually updated with additional research results.

- it is a guide for psychiatrists and psychologists to diagnose and treat individuals seeking mental help.

- often, a diagnosis does not require a __________________________
__________________________________________________________
__________.

- use of the DSM-IV makes extensive use of structured interviews, which involve a standard set of questions asked to the patients or family members.
Issues Related to Drug Treatments

Is mental illness primarily biological or psychological?

Is psychotherapy or drug therapy better?
- a source of debate arises from psychoanalytic traditionalists who argue that to treat psychological illnesses, individuals need to be shown (talked) the source of their conflict.
- according to this view, drug therapy provides only superficial relief, giving rise to the “revolving-door” syndrome of patients going in-and-out of psychiatric institutions.
- for some disorders, ____________________________________________________
  ________________________________________________________
  ____________________________________________________.

Does drug treatment violate patients’ legal rights?
- especially controversial in cases of _________________________
  _______________________.
- if patients have committed no crimes, why should they be forced to treatments - similar to imprisonment without due process of law.
- on the other hand, if patients are a clear danger to themselves or others, is it ethical to withhold treatment?

Are the side-effects of the drugs worse than the mental illness itself?
- this is a real concern and is normally dealt with very seriously.
- requires a thorough knowledge of drugs mechanisms of actions and potential known side-effects, together with close monitoring of patients.
- however, this problem is not unique to psychiatry (ex. _______5
  _______________________________________________________________).
Schizophrenia

Schizo (split, separation, fission) phrenia (mind): ________________
__________________________________________.

First description of schizophrenia by German psychiatrist
__________________________________________.

The main phases or course of schizophrenia:
1) Prodromal phase (1-4 below):

2) Active phase (4-5 below):

3) Residual phase:

![Figure 1. Development of psychosis over time, with arrows indicating points of change noted by the patient or informants.]

Arrow points: 1 = patient first notices some change in self, 2 = family or friends first notice some change in patient, 3 = patient first notices psychotic symptoms in self, 4 = family or friends first notice psychotic symptoms in patient, 5 = first psychotic intervention. See text for amplification.
Diagnostic criteria

A list of several criteria need to be satisfied in order to satisfy a diagnosis of schizophrenia (remember reliability and validity!):

**Criterion A** (anyone of these 3 criteria need to be experienced for at least one week):
1. Two of the following symptoms:
   a. __________;
   b. ______________;
   c. _______________________________________ - patient skips from one idea to the next without logic or explanation;
   d. ______________ - bizarre, purposeless movements (stereotypy) or lack of movements that can produce pressure sores;
   e. ___________________________ - lack or inappropriateness of emotional responses to one’s expression or that of others; and lack of motivation (avolition).

2. ________________________________.
- several types of delusions can be experienced:
  a. **thought insertion**: beliefs that thoughts have been placed directly into one’s mind by telepathic communication.
  b. **thought broadcasting**: others can read one’s mind.
  c. **thought withdrawal**: thoughts are being removed from one’s mind.
  d. **control**: beliefs that one’s behavior and thinking is controlled by someone else.
  e. **paranoid or persecutory**: beliefs that someone is out to harm oneself’s.
  f. **delusion of reference**: meaningless events are very significant.
  g. **delusion of grandeur**: has important role to play in significant event.
  h. **somatic delusion**: one’s body is invaded or harmed.
3. ____________________________________________________: content having no relation to depression or elation.
- visual or tactile hallucinations are not common in schizophrenia.

- these are the main criterion that must occur if the illness is to be called schizophrenia.

Criterion B
- during the course of the disease, functioning in such areas as work, social relations, and self-care is ____________________________ before the onset of the disease.
- if onset is in childhood, it is then the failure to develop the above skills to functional or appropriate levels.

Criterion C (exclusion criterion)
- patient does not suffer from schizoaffective disorder or mood disorder with psychotic features.
- for medical and scientific reasons, if individuals suffer as much or more from mood disorders, even in the presence of psychotic episodes, they are categorized separately as mentioned above.

Criterion D
- continuous signs of the disturbance for ________________, which must include an active phase of _____________ (or less if treated), with or without prodromal and residual symptoms.
- prodromal and residual symptoms include:
  1. marked social isolation or withdrawal;
  2. marked impairment in role functioning as wage-earner, student, or homemaker;
  3. markedly peculiar behavior (e.g., collecting garbage, talking to self in public, hoarding food);
Criterion D (continued)
- prodromal and residual symptoms (continued):
  4. marked impairment in personal hygiene and grooming;
  5. blunted or inappropriate affect;
  6. digressive, vague, overelaborate, or circumstantial speech, or poverty of speech, or poverty of content of speech;
  7. odd beliefs or magical thinking, influencing behavior and inconsistent with cultural norms (superstitiousness, 6th sense, etc)
  8. unusual perceptual experiences (recurrent illusions, presences);
  9. marked lack of initiative, interest, or energy.

- these symptoms are mostly mild forms of the symptoms in Criterion A, which must be experienced for a least 6 months, and precede and follow a short active episode (1 week), in order for the illness to be categorized as schizophrenia.

Criterion E (exclusion criterion)
- other organic factors cannot account for the initiation and maintenance of the disturbance;
- some delusions are associated with organic brain diseases such as Alzheimer’s disease, brain tumors, epilepsy, carbon monoxide poisoning, which should not be mistaken for schizophrenia because it could delay appropriate treatment and perpetuate unnecessary suffering.

Criterion F (exclusion criterion)
- individual shall not be diagnosed as schizophrenic if pattern fits autistic disorder without hallucinations or delusions.

Even with all these criteria and symptoms, a significant level of subjectivity is employed in determining the levels of hallucinations and delusions present.
Etiology (causes) of schizophrenia

There is approximately ____ of the U.S. population that will suffer from schizophrenia during their lifetime, and this incidence is similar in many other Countries.

The onset of schizophrenia typically occurs ___________________ ____________, with onset prior to adolescence rare (although cases with age at onset of 5 or 6 years have been reported).

Women are more likely to have a later onset, more prominent mood symptoms, and a better prognosis. The median age at onset for the first psychotic episode of schizophrenia is in the early to mid-20s for men and in the late 20s for women.

Three (3) main types of evidence support a biological basis for schizophrenia:
1) _____________________________________________________;  
2) ___________________________________________; and
3) _____________________________________________________
_____________________________________________.

- in many studies measuring the size (structure) of the brain and ventricles, ___________________________________________.
- enlarged ventricles either suggest _____________ in surrounding areas (neocortex and subcortical regions) or _____________ _______________ between existing neurons (lower number of synapses, axon boutons, and dendrites).

- enlarged ventricles are also observed in several other diseases, however (Huntington’s disease, for instance).
- functional brain imaging studies of normal and schizophrenic patients performing abstract reasoning tasks show ______________ _________________ in schizophrenic patients (PET, fMRI, CT).

Question: What are some of the major functions of the prefrontal cortex?

- functional brain imaging studies of normal and schizophrenic patients at rest show ________________________________ of schizophrenics.

Question: What schizophrenic symptom(s) do you think would be associated with basal ganglia overactivity?
Schizophrenia and heredity

- the children of schizophrenic parents are _________________ to develop schizophrenia during their lifetime (___%) than children of non schizophrenic parents (___%).

- monozygotic (identical) twin studies of schizophrenia revealed that the concordance (both members have the disease) of schizophrenia is relatively high: if one member of the pair develops schizophrenia, the other member has a ___________________ schizophrenia.

- this is much higher than in fraternal twin studies (dizygotic), where the concordance is only about __%. 

- also, in discordant pairs of identical twins (only one twin develops schizophrenia) having children, the normal twin is just as likely as the schizophrenic twin to produce schizophrenic children 
- suggests ________________________________

Question: Do these results suggest that the gene(s) responsible for schizophrenia are dominant or recessive?
Schizophrenia and the environment
- genetics at best explains ___% of schizophrenic diagnostics, so the other factors __________________________ (physical or psychological).

- great efforts have been devoted to link the behavior of parents, particularly the mothers, with the development of schizophrenia in their offsprings, but only conflicting and unreliable evidence has suggested that controlling and passive mothers might be responsible for schizophrenic development.

- several environmental theories have been put forward, such as virally-mediated, or nutritionally-mediated schizophrenia, but none of these theories have been confirmed.

- some recent evidence strongly suggest a ______________________ that might be associated with schizophrenia;
- for yet unknown reasons, the fetal brain of schizophrenic individuals ____________________________ ____________________________
- these faulty connections usually ____________________________ (hormonal switch???).

- the stigma attached with the schizoid diagnostic has been proposed as one source for the development of full-blown schizophrenia; however, several studies dispute this fact, particularly in societies where such stigmas have usually not developed (Esquimos, for instance).