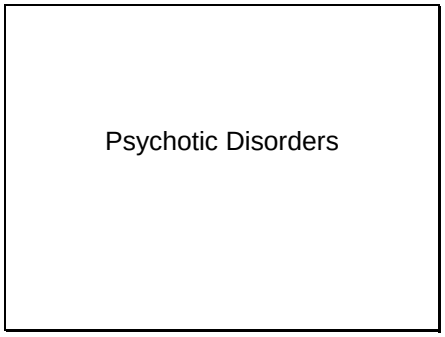
The Clinical Presentation of Psychotic Disorders
Bob Boland MD

Slide 1



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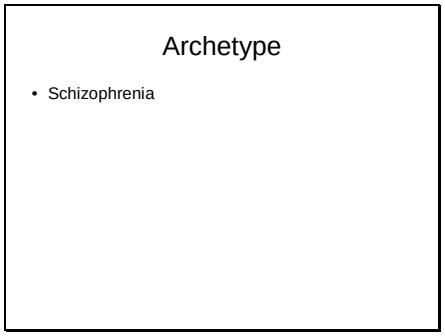

As with all the disorders, it is preferable to pick one “archetypal” disorder for the category of disorder, understand it well, and then know the others as they compare. For the psychotic disorders, the diagnosis we will concentrate on will be Schizophrenia.

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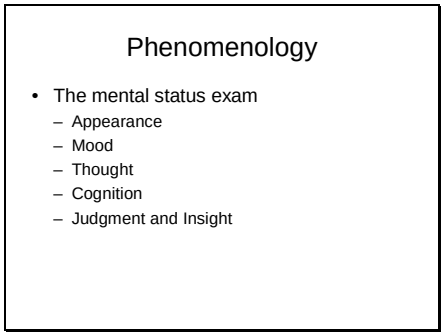

A good way to organize discussions of phenomenology is by using the same structure as the mental status examination.

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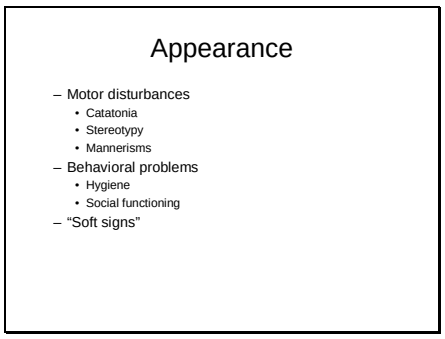

Motor disturbances include disorders of mobility, activity and volition. **Catatonic stupor** is a state in which patients are immobile, mute, yet conscious. They exhibit waxy flexibility, or assumption of bizarre postures as most dramatic example. **Catatonic excitement** is uncontrolled and aimless motor activity. It is important to differentiate from substance-induced movement disorders, such as extrapyramidal symptoms and tardive dyskinesia.

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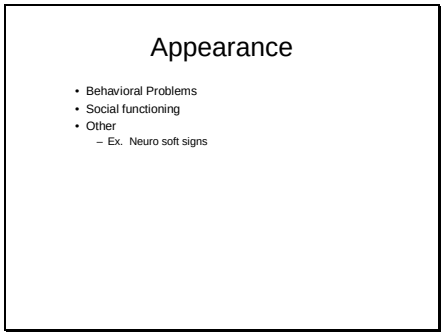

Disorders of behavior may involve deterioration of social functioning-- social withdrawal, self neglect, neglect of environment (deterioration of housing, etc.), or socially inappropriate behaviors (talking to themselves in public, obscene language, exposing self). Substance abuse is another disorder of behavior. Patients may abuse cigarettes, alcohol or other substances; substance abuse is associated with poor treatment compliance, and may be a form of "self-medication" for negative symptoms or medication effects.

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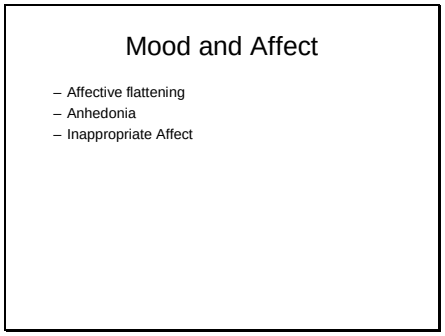

Disorders of mood and affect include **affective flattening**, which is a reduced intensity of emotional expression and response that leaves patients indifferent and apathetic. Typically, one sees unchanging facial expression, decreased spontaneous movements, poverty of expressive gestures, poor eye contact, lack of vocal inflections, and slowed speech. Anhedonia, or the inability to experience pleasure, is also common, as is emotional emptiness. Patients may also exhibit inappropriate affect. Depression may occur in as many as 60% of schizophrenics. It is difficult to diagnose, as it overlaps with (negative) symptoms of schizophrenia and medication side effects.

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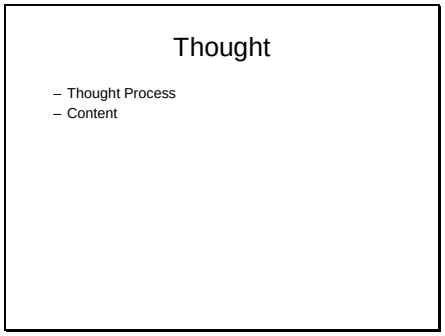

Thought disorders can be divided into different types. Most commonly they are divided into disorders of "process" or of "content".

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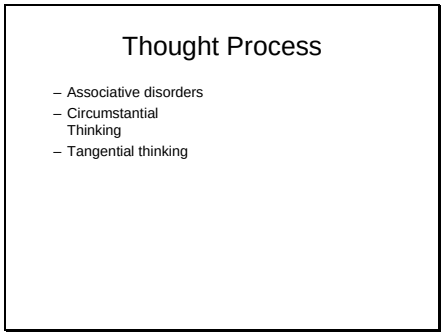

Disorders of thought process involve a disturbance in the way one formulates thought: the process by which we come up with our thoughts. Thought disorders are inferred from speech, and often referred to as "disorganized speech." Historically, thought disorders included associative loosening, illogical thinking, over inclusive thinking, and loss of ability to engage in abstract thinking. Associative loosening includes circumstantial thought and tangential thought.

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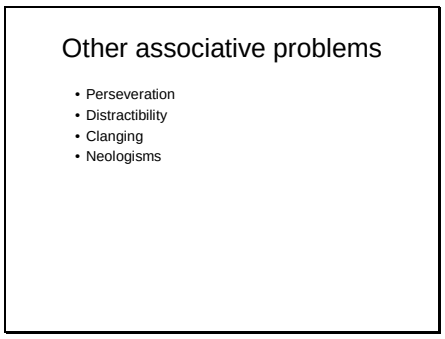

Other types of formal thought disorder have been identified, including perseveration, distractibility, clanging, neologisms, echolalia, and blocking. With the possible exception of clanging in mania, none appears to be specific to a particular disorder.

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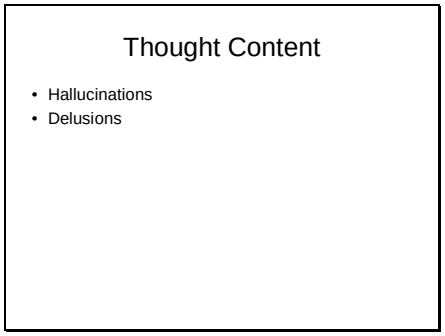

Disorders of Thought Content include hallucinations and delusions..

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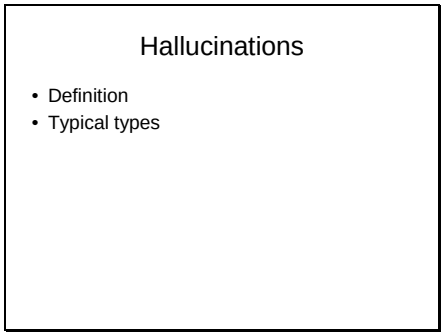

Hallucinations are perceptions without external stimuli. They are most commonly auditory, but may be any type. Auditory hallucinations are commonly voices, mumbled or distinct. Visual hallucinations can be simple or complex, in or outside field of vision (ex. "in head") and are usually normal color. Olfactory and gustatory are usually together--unpleasant taste and smell. Tactile or haptic hallucinations include any sensation--electrical, or the feeling of bugs on skin (formication). These are common across all cultures and backgrounds; however, culture may influence content

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Delusions

Delusions are fixed, false beliefs, not amendable by logic or experience. There are a variety of types. Delusions are most commonly persecutory, but may be somatic, grandiose, religious or nihilistic. They are influenced by culture, and none is specific to any one disorder (such as schizophrenia).

(The cartoon is an example of a delusion of reference: that something that is independent of you is in fact intended for you. WE often get at these by asking patients whether the television or radio seems to be sending them messages.)

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Comparing types of Though Disorders:

2 video examples demonstrating first a disorder of thought process, and then one of content.

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Cognitions

- Subtle impairments
  - Frontal lobe function
    - Associative thinking

Among other disorders of cognition is **lack of insight.** Truly psychotic persons have a breakdown in this ability to rationally critique their own thoughts. This may best distinguish psychotic disorders (like Schizophrenia) from "normal" hallucinations and delusions.

Other cognitive symptoms are usually normal (for example, orientation and memory). However, IQ usually is less than normal population for their age; it does not tend to decline over time. And there appear to be subtle cognitive deficits in persons with psychotic disorders. For example for years investigators have noticed deficits frontal tasks (see Dr. Malloy's lecture on frontal lobes) such as difficulties with pattern recognition.

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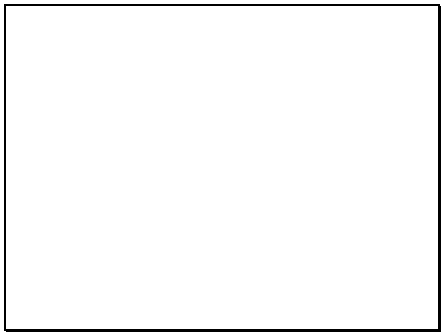

For example, Sorkin and colleagues created a virtual maze. The maze consists of a series of rooms, each of which included three doors. Each door was characterized by three features (color, shape, and sound), and a single combination of features-the door-opening rule-was correct. Subjects had to learn the rule and use it. In that sense, its like a virtual Wisconsin card sort.

They studies the maze with 39 schizophrenic patients and 21 healthy comparison subjects. They found that by taking into account various error scores, response times, navigation ability and overall strategy they could correctly predict 85% of the schizophrenic patients and all of the comparison subjects.

Sorkin A, et al, American Journal of Psychiatry. 163(3):512-520, 2006.

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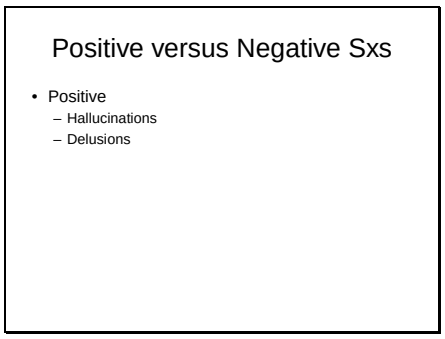

It is important to differentiate **positive symptoms** of schizophrenia from **negative symptoms**. Positive symptoms are disorders of commission, including things patients do or think. Examples are hallucinations, delusions, marked positive formal thought disorder (manifested by marked incoherence, derailment, tangentiality, or illogicality), and bizarre or disorganized behavior.

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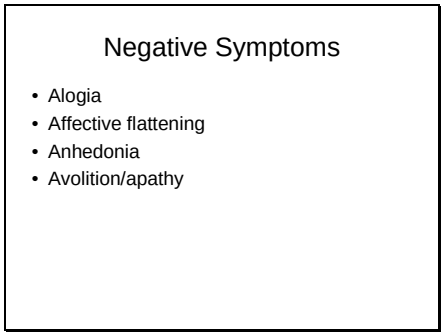

Negative symptoms are disorders of omission: things patients don't do. Negative symptoms include alogia (i.e., marked poverty of speech, or poverty of content of speech), affective flattening, anhedonia or asociality (i.e., inability to experience pleasure, few social contacts), avolition or apathy (i.e., anergia, lack of persistence at work or school), and attentional impairment. The relevance of these symptoms is unclear. Perhaps they represent independent subtypes of schizophrenia? Probably not. Different stages of disease? Maybe--positive symptoms tend to occur early on, negative symptoms later. Most patients have a mix of symptoms.

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Epidemiology

- 1% prevalence
- Genders
- Socioeconomic

There is an overall 0.7% incidence of "Nonaffective Psychosis" in the National Comorbidity Study. This study included schizophrenia, schizophreniform disorder, schizoaffective disorder, delusional disorder and atypical psychosis.

Schizophrenia has about 1% lifetime prevalence in ECA studies. There is a lower incidence (chronic disorder): 1/10,000/year. Incidence is equal across gender, but men may get it earlier. It most commonly starts in late adolescence/early adulthood. It rarely occurs in children. Women are more likely to get late onset. Generally, this version tends to have better psychosocial functioning. Schizophrenia occurs throughout the world, regardless of site or culture.

Schizophreniform Disorder has a lifetime prevalence of 0.2%, with 1-year prevalence of 0.1%. Otherwise, it is similar in epidemiology to Schizophrenia.

Schizoaffective Disorder is probably less common than Schizophrenia. There is little data about the community prevalence of Delusional Disorders. However, lifetime prevalence appears to be 0.03%. Clinical studies show delusional disorder to be 1-2% of inpatient psychiatric admissions.

Brief Psychotic Disorder and **Shared Psychotic Disorder** also have little information and are probably rare. Shared Psychotic Disorder may go unrecognized in clinical settings; it is also probably more common in women.

Psychotic Disorder Due to a General Medical Condition, and Substance-Induced Psychotic Disorder are both probably common, particularly in clinical settings.

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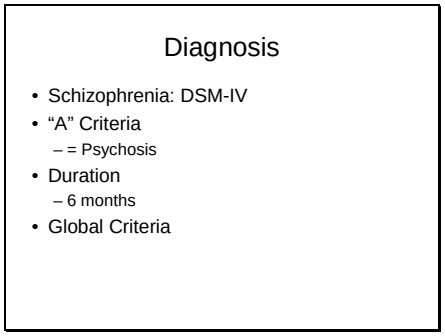

Patients have to have been psychotic at some time. This is referred to as the "A" Criteria of Schizophrenia, as they are listed under the "A" outline heading in DSM-IV. The next slide will cover these, but it basically serves as a list of possible psychotic symptoms.

There is also a time criteria. The acute symptoms must persist for 1 month (less if treated). And the overall duration of the disorder must be at least 6 months: that, is the patient must show some signs of disturbance (psychotic episode + prodromal or residual symptoms) for at least 6 months.

The Global Criteria. This is my term, not an official one. It simply reflects almost every disorder in DSM-IV includes a criteria saying that the disorder has to impair the individually in some way. Psychiatrists don't just treat people because they seem "weird" or unusual—they must have some sort of social or occupational dysfunction as a result of the disease.

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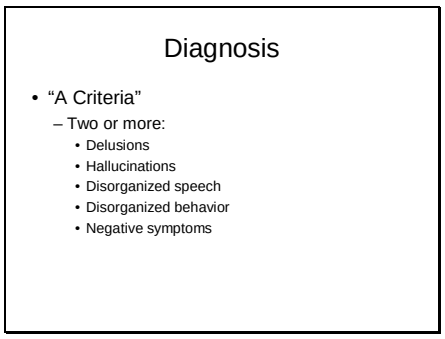

The "A" Criteria of Schizophrenia basically says that, to have schizophrenia, you have to have been psychotic at some point. They define psychosis as having one of the following symptoms:

delusions, hallucinations, disorganized speech, disorganized behavior/catatonia, and negative symptoms

You have to have had at least 2 of these symptoms to meet the criteria. Or, if you have really bad hallucinations or delusions, that's good enough.

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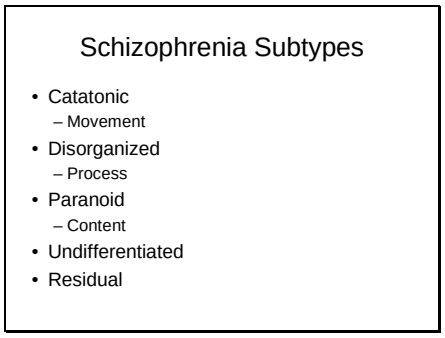

There are certain subtypes of the disorder as well. The purpose of subtyping is to improve prediction of likely effective treatment and/or course of illness.

The types are listed as follows:

Paranoid subtype: a preoccupation with one or more delusions or frequent auditory hallucinations; disorganized speech/behavior, catatonic behavior, and flat or inappropriate affect are not prominent.

Disorganized subtype: characterized by disorganized speech and behavior, and flat or inappropriate affect; it does not meet the criteria for catatonic schizophrenia.

Catatonic subtype: dominated by at least two of the following: motoric immobility as evidenced by catalepsy or stupor, excessive motor activity, extreme negativism or mutism, peculiarities of voluntary movement (e.g., stereotypies, mannerisms, grimacing) and echolalia or echopraxia.

Undifferentiated subtype: which is a residual category for patients meeting criteria for schizophrenia but not meeting criteria for the paranoid, disorganized, or catatonic subtypes.

The residual subtype: as described in DSM-IV is used for patients who no longer have prominent psychotic symptoms but who once

met criteria for schizophrenia and have continuing evidence of illness.

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Other Diagnosis

- Schizophreniform
- Schizoaffective
- Brief Psychotic
- Delusional Disorders
- Shared Psychoses
- Psychosis due to something' else

Schizophrenia is the most common psychotic disorder. (that may not be exactly true: "secondary psychotic disorders", that is, psychotic disorders caused by drugs or medical disorders are probably more common, but they are rarely studied, so we know less about them).

However, there are other psychotic disorders, and these should be differentiated from schizophrenia:

Schizophreniform disorder is like Schizophrenia except the duration is between 1 and 6 months (prodrome + episode + residual). If the duration is less than 1 month it is Brief Psychotic Disorder. Impaired psychosocial functioning is not required for the diagnosis; probably about 2/3 go on to become Schizophrenics.

Schizoaffective Disorder has symptoms of both Schizophrenia and of a Mood Episode:. It fulfills symptoms of "Criterion A" of Schizophrenia. For diagnosis, at some point, psychotic symptoms have to be independent of mood (for at least 2 weeks). Symptoms of a Mood Episode may include either manic, depressed or mixed symptoms. These have to occur for a "substantial" amount of time; otherwise patient might be a depressed schizophrenic.

Delusional Disorder is a disorder in which patients present with persistent delusions. Delusions are nonbizarre, thus differentiating this from schizophrenia. Hallucinations are not prominent. Generally, psychosocial functioning is okay, except for direct impact of delusion (ex. Might not go on bus, because thinks people talking about them).

Brief Psychotic Disorder is different in that the psychotic symptoms last for less than a month and there is full remission by one month.

Shared Psychotic Disorder is also called *Folie á Deux* and has two components. The inducer or primary case is a person already has some delusional disorder. Also, a second person, in close relationship with the inducer, comes to share the delusion. This person is usually in a dependent relationship with the inducer. This person rarely seeks treatment; rather, shared psychotic disorder comes to attention when the inducer is treated. Treatment is to separate this person from the inducer.

Psychotic Disorder Due to a General Medical Condition includes hallucinations or delusions that are directly secondary to a medical disorder. One must differentiate this from Delirium, in which delusions or hallucinations can occur, but are part of the delirium. In Psychotic Disorder Due to a General Medical Condition, the psychosis occurs in a clear sensorium.

Substance-Induced Psychotic Disorder has the same story as

Psychotic Disorder Due to a General Condition, including the Delirium rule out.

Psychotic Disorder Not Otherwise Specified is a term usually used for cases of inadequate information or disorders that don't meet criteria for one of the "official" psychotic disorders. When you get to the clinical years, you'll see this disorders ("Psychotic disorder NOS") used a lot. That's fine, but don't be fooled: when its used, it isn't being used as a real disorder, it's more likely to be used as a provisional diagnosis. For example, if a patient presents to an emergency department complaining of hallucinations or delusions, we know they are psychotic, but we probably don't know why just yet.

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Differential

- Delirium
- Dementia
- Medication-induced
- Other Psychiatric Illnesses
  - Other psychotic disorders

Medical Conditions

There is a long list of medical conditions that can cause psychotic symptoms. Some would justify a diagnosis of Psychotic Disorder Due to a General Medical Condition, but you wouldn't want to make the diagnosis of, say Schizophrenia, without ruling one of these diagnoses out. The most common of these is **delirium.** Delirium is an acute confusional state, with multiple possible etiologies that can cause delusions and hallucinations. Usually delusional hallucinations are poorly formed, and not very elaborate, and they occur in a setting of "clouding of consciousness." **Dementia** is another disorder to rule out. Disorders such as Alzheimer's can cause delusions and hallucinations. Typical are persecutory delusions: after losing wallet, might accuse loved one of stealing it. These also tend to be poorly formed, not elaborate, and they wouldn't justify a second diagnosis of a psychotic disorder.

Neurological Disorders must be ruled out as well. These may include *Temporal Lobe Epilepsy, tumor, stoke, and brain trauma.*

General Medical disorders to consider may *include endocrine and metabolic disorders (like Porphyria), vitamin deficiency, infections, autoimmune disorders (like Systemic Lupus Erythematosus) or toxins (like heavy metal poisoning).*

Medications and drugs that can cause psychotic symptoms may include *stimulants (amphetamines, cocaine) hallucinogens (PCP), anticholinergic medications, Alcohol Withdrawal (Delirium Tremens), and barbiturate withdrawal.*

Other Psychiatric Illnesses mistaken for psychosis include the following: *Major Depression with psychotic features* (which only occurs during depressive episodes), *Panic Disorder* (Patients may report they feel they are "going crazy"), *Depersonalization Disorder, and Obsessive-Compulsive Disorder.* In OCD, obsessions may reach point where they seem like delusions. However, classically speaking, they are seen as being ego-dystonic, meaning that the patient has good insight into obsessions as being abnormal and intrusive. *Personality Disorders*, especially Cluster B (Borderline Personality Disorder, for example), can show elements of psychosis. Finally, one must consider factitious disorder and malingering as possibilities. Fortunately, these disorder are difficult to fake.

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Comorbidity

- Depression
- Substance Abuse

Comorbidity is very common. In one study of new onset psychosis, about 50% of patients had some other medical or psychiatric disorder. The most common of these **are substance abuse** and **mood disorders**.

Substance Abuse is more common in the general population and is associated with poorer outcome. Most often it is alcohol abuse.

Mood disorders are also common; 60% of Schizophrenics are reported to have depressive symptoms. But depression is difficult to diagnose, as it can be comorbid with Schizophrenia, be Schizoaffective, or can be the primary disorder (Major Depression with Psychotic Features) depending on one's assessment of its relative predominance.

Medical disorders are also more common in psychotic individuals than in the general population (17% in one study). These patients tend to be older. The effect on outcome depends; in first episode cases, it may predict better outcome. However, in chronic disorders, it is probably associated with a poorer outcome.

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Course and Prognosis

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Course of Schizophrenia

- Begins
  - Late teens, young adulthood
  - Men versus women
  - Older onsets

Schizophrenia is generally a disease of early adulthood, making it very devastating, as it affects people just as their mature lives are beginning. It usually starts in the late teens, or early 20's, though it can occur later. It tends to occur earlier in men than women, so it isn't as unusual to see a woman begin to show signs of schizophrenia in her late twenties or thirties. It rarely begins after 40, though there are reported cases. If an elderly person presents with psychosis, the psychotic disorder is much more likely to be due to something else (or, the history is incomplete).

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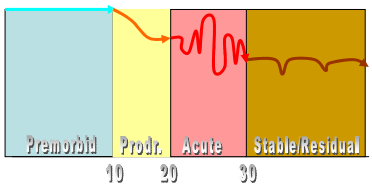
Course of Schizophrenia



Schizophrenia has three stages of disease: prodromal phase, active phase and residual phase. Prodromal phase may precedes the active phase of illness by many years. It is characterized by social withdrawal and other subtle changes in behavior and emotional responsiveness. Active phase has psychotic symptoms ("Criterion A"), which predominate. Residual phase is similar to the prodromal phase, although affective flattening and role impairment may be worse. Psychotic symptoms may persist, but at a lower level of intensity, and they may not be as troublesome to the patient. Symptoms tend to change over time. The preponderance of positive symptoms occur early. Over time patients develop more negative or deficit symptoms.

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Prognosis

- Usually deteriorates
- ~ exacerbations w/ incomplete recovery
- Symptoms change over time

There are 4 possible outcomes for schizophrenia:

Complete resolution of psychosis, with or without treatment. Complete resolution is typical of brief reactive psychosis, and medical/substance related causes of psychosis. It can also be associated with mood disorders with psychotic features.

.*Repeated recurrences with full recovery every time.* These are more typical of Mood disorders with psychotic features (ex. Bipolar Disorder).
.*Repeated recurrences in which recovery is incomplete* so that a persistent defect state develops. These are typical of Delusional Disorder, which tends to have a chronic, unremitting course. Also typical of schizophrenia.
.*Progressive deterioration*. Progressive deterioration is typical of schizophrenia.

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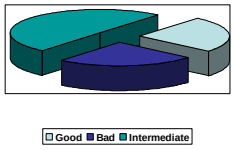
Outcome



One metanalysis suggested that after a first admission 1/4 had a good outcome (defined as no hospital readmission during follow-up), 1/4 had a bad outcome (defined as continuous hospitalization during follow-up, or moderate to severe intellectual or social impairment) and ½ had an intermediate outcome. Schizophrenia has a high mortality rate: perhaps 10% commit suicide.

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Positive Predictors

- Acute onset
- Short duration
- Good premorbid functioning
- Affective symptoms
- Good social functioning
- High social class

It is important to consider positive and negative predictors of course when determining prognosis. Most of these make sense and are true of most illnesses. That is, diseases that strike suddenly, and for short duration in persons who are otherwise high functioning with good resources are going to be less severe than the opposite.

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Poor Predictors

- Insidious onset
- Long duration
- Family hx of psych illness
- Obsessions/Compulsions
- Assaultive Behavior
- Poor premorbid functioning
- Neurologic/anatomic abn.
- Low social class

The poor predictors, or predictors of a bad course, are mostly opposites of the good predictors.

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More Examples

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Schizophrenia Subtypes

- Catatonic
  - Movement
- Disorganized
  - Process
- Paranoid
  - Content
- Undifferentiated
- Residual

A reminder of the schizophrenic subtypes. Video examples will follow--the audience should comment on the prominent symptoms and likely subtype.