

Schizophrenia

Students are expected only to briefly review the first 6 clinical vignettes and the related topics of Dx, psychopathology, risks, and management

Resource Document

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Roger Peele, MD, DLFAPA
Chief Psychiatrist, DIIHS, Montgomery County government,
P0 Box 1040, Rockville, MD 20849-1040.
Clinical Professor, GWU
Phone: 240 777 3351
RogerPeele@aol.com
WWW.RogerPeele.com

Schizophrenia -- Outline

1. Vignettes to help review sections on diagnosis, psychopathology, risks, and management
2. Importance
3. Conceptual History
4. Prevention
5. Diagnosis
6. Scoring Axis V
7. Psychopathology
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Vignettes

Some Provided by Julia Frank, MD

Use these cases to review sections of Psychopathology, Diagnosis, Risks and Management

1. A 40 y/o, homeless woman presents to the ER at 2 AM, saying she needs prenatal care because she is pregnant. She has a negative pregnancy test, but she insists that the father is a man who had sex with her during an inpatient psychiatric hospitalization two years ago. She has tried, she says, to terminate the pregnancy, and there are deep cuts on her abdomen that look a few days old. She says she hears the Virgin Mary and “Author,” telling her that abortion is a sin, that she is a terrible person and will be going to hell. She feels that her actions are being watched by these and other unnamed people, who tell her not to go to any homeless shelter. She, however, does feel she is allowed to come to the hospital, because that is where babies are born. On mental status examination, she is emotionally flat, with monotonous, rambling speech. She seems distracted. She is a high school graduate, and she can remember three objects at five minutes, subtract sevens down to 45 without an error, but she cannot perceive the similarity between an egg and a seed [the question agitated her].

A. What are the florid [positive] signs, conative deficits and cognitive deficits described [“negative signs”]?

B. What are some of the non-criterion or associated findings described in the case?

2. A thirty-five year-old, never-married man is brought to the hospital by his mother. He was discharged from the hospital three weeks before, having been restarted on the oral risperidone [4 mg] that had previously controlled his schizophrenia. Prior to the

hospitalization, he had stopped his medication because he was disturbed by its sedating effects. However, without some kind of antipsychotic medication, he becomes very withdrawn, irritable and disorganized. He mumbles to himself, and his speech is punctuated with obscenities. His mother is his substitute payee, and they are frequently in conflict over his access to money. He wants to spend freely on cigarettes and expensive coffees, while she feels she should use his disability check to help defray their rent and medical expenses. He does not abuse drugs or alcohol, but at the time he was first diagnosed, he was arrested for throwing a rack of magazines at a store clerk. He was arrested as a teenager for fighting with a fellow student.

A. What are the main risk factors for violence in this patient?

B. What factors decrease the risk of violence?

C. Who is the likely target?

D. What can/should be done to reduce the risk of violence?

3. Twenty-three year old woman has hx of going well in school until the 12th grade, when her school work deteriorated and she quit school. Some relatives believe that she was sexually assaulted at the beginning of that school year, but she never responded to questions about that possibility. More generally, her communications became very limited. For the next five years she lived with her mother, but about 6 months ago, her mother died. Relatives tried to help her, but became very concerned about her lack of communicating, her not eating, and had her hospitalized. On the psychiatry ward, she would initiate no conversations, would rarely respond and when she did, it was usually “no” or its equivalent. She always wanted to wear her yellow blouse, usually stood at a particular spot on the ward, would eat standing and hitting the folk on the plate each time she was about to put some food on the plate. She had an assertive public defender who was able to prevent any involuntary medicating. When September came, she changed where she stood on Sunday afternoons to where she could stare intently at the ward’s TV set.

A. What terms are used for her behavior?

B. Dx?

C. What should staff be saying to her?

D. If allowed to medicate, what should be first choice?

E. Does her September Sunday afternoon change in behavior suggest a way of relating to her?

4. 19 y/o college student who has been uncontrollably excited for the past week. He has barely slept, and his resident assistant describes his room as being completely chaotic, even beyond normal for a college student. He is floridly psychotic, talks rapidly, cannot be easily interrupted, is loud, claiming that he is working on a paper that will “bust the department of homeland security wide open.” He says he has found coded messages in his psychology text. His answers to questions are highly tangential, and he rapidly changes topics, such as talking about being in Boston, then switches to talking about red sox, then paper boxes, then saying his father was a boxer, and so from topic to topic. He is very restless in the examining room. He demands pen and paper, because he feels compelled to write down his brilliant ideas immediately, before they are replaced by others. His grades last semester were Cs and Ds. He attributes this to having been dumped by a girlfriend, after which he skipped classes, sleeping much of the day, eating much more than usual, listening to sad music, feeling gloomy, and pessimistic. A week ago, that changed as he no longer needed to sleep or eat, and he realized that he understands what is wrong with the Department of Homeland Security, and he talks of needing to tell the President Obama.

A. His style of talking is called?

B. Dx?

5. 45 y/o incarcerated man who believes that the lawyer appointed to defend him on a felony charge was really conspiring with the prosecuting attorney. He thinks the lawyer wanted him out of the way so he can seduce his girlfriend, whom the lawyer met during the period prior to the hearing of his case. He cites a number of incidents in great detail to prove his assertions, but aside from circumstantiality in relation to his suspicions, he is well organized. He has no friends and limited contact with his family. He has normal memory, concentration and abstraction on mental status exam.

A. Probably dx?

B. Treatment Plan?

6. 55-year-old, single, unemployed, dx of schizophrenia who presents to new clinic. Her medical history is significant for hypertension, gastroesophageal reflux disease, hyperlipidemia, diabetes mellitus, and morbid obesity. She lives with a friend who also serves as a caregiver, cooking her meals and taking her to medical appointments.

She reports ongoing auditory hallucinations lasting a few minutes approximately every other evening. Sometimes, she hears her father (deceased 10 years prior) speak to her. The voice is minimally intrusive and she cannot make out what he is saying. Medications have diminished the voices, although they have never completely gone away.

Her current medications include aripiprazole 30 mg daily; aspirin 81 mg daily; enalapril 10 mg daily; ranitidine 150 mg daily; glipizide 5 mg twice daily; and metformin 500 mg daily. Her previous psychiatric medications include ziprasidone and quetiapine, on which she gained a significant amount of weight.

Weight, 312 lb. Height 5'7". She attends a psychiatric day program but avoids most physical activity. A survey of her daily food intake reveals frequent intake of bacon, sausage, fried chicken, cakes, and cookies, as well as three or four cans of soda daily.

Treatment plan?

7. 20 y/o woman was placed on the hospital's forensic unit after a court hearing on murder charges. She had done poorly in school and dropped out in the tenth grade. She had three children in her late teens, went on welfare and lived with her grandmother. For a number of years, she was a heavy user of marihuana, and began getting "spiced" version of the marihuana about ten days ago before admission. She began to believe that her children were possessive by the devil, saw no hope for them and decapitated all three.

A. Probably dx?

8. David, now 35, was admitted to a university psychiatry ward at 18. He had done well academically in elementary and high school, had boy-friends but avoided dating. In college his grades in the first semester were average, but in the second semester, he began to struggle academically. Each week he would play bridge with three peers on Saturday evenings. During the final exam week he failed to show for his German exam. When he arrived at his friend's home to play bridge, he laid out his cards face up, and seemed bewildered as to what to do. He talked about a woman in a nearby city, then talked of his father, then mentioned a chemistry problem, moving from topic to topic, topics that apparently had no connection with each other. The bridge players had no idea what to do and told him to return to his home, only 50 yards away. The next day he shows up at a girl's home and chases her about her yard, and is hospitalized on a psychiatry ward. On examination, his answers are sometimes bizarre, and speaks of Nazi being out to get him. He is medicated with olanzapine, eventually his clinicians settle on 20 mg/d. With olanzapine, supportive psychotherapy and supported employment, he is able to live alone. Mental status finds that he stills worries about the Nazi, but he is able to be a drafting assistant during the day and watches TV most of the rest of the time. He slowly puts pounds on his 5'8" frame and now weighs 285 lbs, 95 pounds more than his college days. Tests are done and they find: BP: 160/110, triglycerides 300, HDL 35, LDL 135, fasting glucose 130.

A. Dx?

B. When the parents ask why he is ill, what might be an acceptable response?

C. How to approach the physical and lab findings?

9. Nathaniel Anthony Ayers, Jr. (born January 31, 1951) is a musician who was the subject of the book and movie [2008], SOLIST. Ayers began playing the cello during middle school. He attended the Juilliard School in New York on a scholarship as a cellist, but suffered a mental breakdown manifested by delusions, hallucinations, and incoherence during his third year and was institutionalized. Ayers was one of the few African-American students at Juilliard at that time. After dropping out of Juilliard, he lived with his mother in Cleveland, Ohio, where his mental status continued to deteriorate. He received electroshock treatment for his illness and antipsychotic medications with no or limited results. After his mother's death in 2000, he moved to Los Angeles, California, thinking that his father lived there. Homeless and having schizophrenia, Ayers lived on the streets of Los Angeles and made a meager living playing half-broken instruments (such as the violin and cello) on street corners for change. *Los Angeles Times* columnist Steve Lopez met Ayers on the streets, and discovered his background at Juilliard. Lopez quickly arranged for Ayers to have a much improved living condition in a group home, but it took nearly a year for Ayers to gradually accept not living in the streets. [Lopez's subsequent book, *The Soloist: A Lost Dream, an Unlikely Friendship, and the Redemptive Power of Music*, was based on his relationship with Ayers. The book has been adapted into a film and a play titled *The Soloist*, released April 24, 2009 with Jamie Foxx and Robert Downey Jr. in the lead roles.]

A. Dx?

B. What signs of schizophrenia illness likely caused the extremely slow acceptance of much better living condition?

10. 21 y/o male was admitted to the mental hospital with distrust of everyone, delusions, hallucinations, and circumstantiality. Hx found he was in an unsupportive family, did poorly at school, had few friends, and was fired again and again after being hired for menial jobs. He was placed on a unit where the pressures to discharge were minimal and prescribed quetiapine, 200 mg/d. Delusions and hallucinations disappeared. Slowly he and the staff developed a warm, trusting relationship to where he was helping with other pts, was given the ward key to go buy food for the staff and so forth. He talked about eventually going to college and becoming a nurse. He got a paying job on the grounds of the hospital. The social worker found a nice apartment that he and the staff thought was wonderful and a job at a local grocery store. He was scheduled for a clinic appointment

in two weeks after discharge. Four days after discharge, he was found dead, from having hung himself. No note.

A. Dx?

B. What factors contributed to his risk for suicide?

11. An unmarried, unemployed, male with chronic, undifferentiated schizophrenia, who at age 64 years was discharged from a state hospital into a community assisted-living program. Although being discharged into the community is unremarkable, two facts make this patient's discharge noteworthy. First, he had been hospitalized continuously in this single institution for almost half a century since the age of 16 years. Second, the major obstacle to his discharge was not the severity of his psychosis, but the lack of optimal treatment options for his chronic and potentially life-threatening hyponatremia.

At the time of his admission (1958) and throughout the initial 20 years of hospitalization, the patient's annual physical exams were reported as "within normal limits," apart from dorsal scoliosis and an incident in 1976 when he removed one of his testicles. During the 48-year course of hospitalization, the patient was treated with a variety of antipsychotic medications. Thus, he received a series of first- and second-generation drugs in monotherapy and various combinations that changed in drug and dose as he was transferred from unit to unit. He was considered treatment-refractory, but unfortunately, never received clozapine because of a history of hyponatremia-related seizures.

Although his hospital progress notes refer to occasional bouts of excess fluid consumption, the patient was not formally diagnosed with polydipsia until 1982. His treatment at the time consisted of thioridazine (500 mg) and fluphenazine decanoate (75 mg every 3 weeks). It is unclear whether this new diagnosis of polydipsia represented an actual change in patient behavior or an improvement in staff observation. Nevertheless, the patient's medical record began reflecting a developing management problem.

The patient began to aggressively grab cups of coffee and water from staff and other patients and was often observed drinking from the shower and toilet. He was placed on frequent one-to-one observation because of his intermittent compulsion to consume fluids. On several occasions, he was admitted to a local community hospital for acute "electrolyte imbalance," treated with saline infusion and/or fluid restriction, then discharged back into the state hospital with normal electrolytes. Ultimately, the compulsive fluid consumption returned and eventually developed into a state of chronic mild hyponatremia with intermittent episodes of acute severe hyponatremia (i.e., serum sodium concentration $[Na^+]$ dropping to less than 120 mEq/L in a 24-hour period).

Treatment?

12. The patient is an 11-year-old who began to having difficulties in reading and word retrieval two years ago. A few months later, he began talking and laughing to himself and was evaluated in the emergency room of a local hospital to rule out organic causes for these behavioral changes. He had a normal magnetic resonance imaging (MRI) scan of his brain, CSF exam, and electroencephalogram (EEG). He was diagnosed with depression and prescribed sertraline, which was not helpful.

His psychotic symptoms continued to progress, and he became increasing isolative, believing “zombies are walking in and out of my head” and hearing their voices. His mother described his speech as a “word salad” and he experienced insomnia and poor appetite.

Initially, he had a poor response to quetiapine (600 mg a day) in terms of behavioral control and was given a trial of olanzapine, which was slowly increased.

The patient was hospitalized in 20 months ago for 7 weeks after he attempted to jump out of a car in response to auditory hallucinations. He was discharged on a combination of olanzapine (25 mg at night), risperidone (1 mg at night) and lithium (300 mg twice a day). He showed a gradual decrease in his psychotic symptoms and began reintegrating slowly back into the school and the community.

His birth history is significant for oligohydramnios and thick meconium during spontaneous vaginal delivery at full term with Apgar scores of 4 and 7 at 1 and 5 minutes, respectively. No resuscitation was required and no immediate postnatal complications were noted.

Because of delayed motor and speech milestones, he has received speech and occupational therapy since the age of 2 years. He was clinically diagnosed with absence seizures, and an abnormal EEG prompted a trial of lamotrigine at the age of 4 years, to which he responded favorably and has been seizure free since. He also has significant motor and coordination problems and receives adaptive physical education. He was diagnosed with attention-deficit/hyperactivity disorder (ADHD) at 5 years of age and has received various stimulants.

His family history is significant for possible bipolar disorder and ADHD in father; depression in mother; multiple congenital anomalies in his 9-year-old brother; obsessive-compulsive disorder in an uncle; and possible psychosis in an aunt. His neuropsychological profile showed a significant fall from a Full Scale Intelligence Quotient (FSIQ) of 97 in December 2007 to 52 in August 2010.

Question: What studies and examinations would you expect to be done in an academic setting before deciding on Dx of Early Onset Schizophrenia?

The following from a clinical summary: *“His physical examination was normal, except for mild hypotonia and motor apraxia. His routine blood work showed normal*

electrolytes, complete blood count, and urinalysis. He underwent a detailed neuropsychiatric workup, which was largely negative. His ammonia, thyroid stimulating hormone (TSH), B12 and folate, lactate, and pyruvate levels were all normal. He was negative for antinuclear antibodies, and the erythrocyte sedimentation rate (ESR), acylcarinitine level, and ceruloplasmin level were also normal. He was negative for late-onset Tay-Sachs disease. He had normal beta-galactosidase activity, a normal plasma homocysteine level, normal peroxisomal panel, and purine and pyrimidine panel to rule out GM1 gangliosidosis, homocystinuria, and peroxisomal disorders, respectively. Mucopolysaccharidoses such as Sanfilippo's syndrome were ruled out because of normal urine tests and skin biopsy. The Smith-Lemli-Opitz syndrome screen was negative.”

Schizophrenia — Importance

In comparison to the general population, people with schizophrenia are more likely to:

- Be disabled — at great cost to society
- Have substance-related co-morbidities
- Have non-psychiatric medical illnesses
- Be suicidal
- Be violent
- Be victimized criminally
- Be incarcerated.

Schizophrenia History of Concepts - Kraepelin

Emil Kraepelin [1856-1926][German] developed concept of dementia praecox as an illness with cognitive impairments and psychotic signs that are relatively permanent, gave the breakdown of catatonic, hebephrenic, paranoid and other types and felt that the primary neuropathology was in the frontal lobe.

Eugen Bleuler [1857-1939][Swiss] coined the term “Schizophrenia” and developed the concept that the fundamental signs of the illness all resulted from a lack of mental connectiveness between ideas and between ideas and emotions = pathognomonic. Highlighted finding loose associations, flat affect, ambivalence, and autism [“4 a’s”].

Robert Spitzer [1932-] [Columbia U] directed effort that developed DSM-III [1980] and Nancy Andreasen [Iowa U] led team that returned to a Kraepelin-like criteria set for “schizophrenia.” To limit to long-term illness, criteria set required minimum of 6 months of illness.

Andreasen also was main proponent of concept of “positive” and “negative” signs.

Consequence has been to narrow the definition of schizophrenia, leading to much less diagnosing of this disorder, further narrowed in DSM-III-R [1987] by establishing the criteria for schizoaffective disorder and in DSM-IV [1994] by splitting off other dx locations for catatonia.

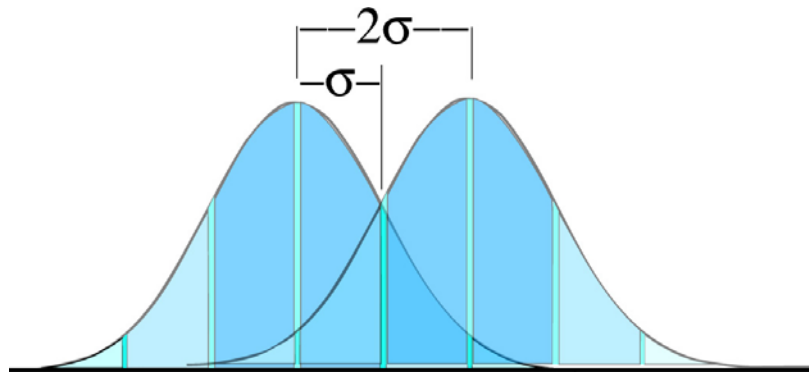
E. Fuller Torrey [NIMH, Saint Es, and Stanley Foundation] stressed that schizophrenia was a biological disorder, a brain disease. Torrey was early guru for National Alliance for the Mentally ill [NAMI], which became a substantial support and advocate organization beginning about 1980 for people with schizophrenia. Torrey's research since the early 1970s has focused on damage to fetus during second trimester, especially from viruses.

Concepts Abnormalities

Over the past three decades, nonspecific abnormalities have been suggested in:

- Genetics
- Neuroanatomical
- Neuroimaging
- Neurochemical
- Psychological

BASIC FINDING TO VIRTUALLY ALL RESEARCH: THE RESEARCH RESULTS ARE TWO BELLSHAPED CURVES, ONE OF PEOPLE WITH SCHIZOPHRENIA AND ONE OF PEOPLE WITHOUT SCHIZOPHRENIA, THAT OVERLAP ENORMOUSLY. FINDINGS ARE NOT PATHONOMIC.



Genetics:

- ***50% of monozygotic twins have schizophrenia***
- About twenty genes have been shown to have a higher incidence in schizophrenia than the normal population, but none are pathognomonic. Furthermore, no combinations are pathognomonic.

Neuroanatomical – I

Neuroanatomical findings, all slight tendencies — **not abnormal**, decrease:

- Brain weight total and decreases are in frontal, temporal, parietal, and inferior parietal lobes
- Cortical gray matter, seen as decrease in cortical thickness,
- Thalamus, especially dorsomedial nucleus

- Hippocampal gyrus has loss of neurons [only area that has less neurons. Decrease size of other areas result of fewer axons]. Some memory impairment is associated with this loss of neurons.
- Parahippocampal gyrus
- Superior temporal gyrus
- Olfactory bulb
- Decreased “spines” on the dendrites.

Neuroanatomical findings, all slight and within normal range, **increases:**

- Sulci
- Ventricular size
- Caudate nucleus
- Corpus callosum

Neuroanatomical findings, slight and not abnormal, of qualitative abnormalities:

- Reversal in normal hemispheric asymmetry
- Hippocampus cytoarchitectonic abnormalities
- Cingulate cortex cytoarchitectonic abnormalities
- Entorhinal cortex cytoarchitectonic abnormalities
- Dorsolateral prefrontal cortex cytoarchitectonic abnormalities

Cerebral Blood Flow Studies

Testing patients with reality distortion dimension [delusions or hallucinations] finds cerebral blood flows are:

- Increased in medial temporal lobe [including Parahippocampal gyrus]
- Decrease in posterior cingulate cortex
- Decrease in lateral temporoparietal cortex
-

Disorganized dimension [thought disorder, inappropriate affect] finds blood flow changes are:

- Increased in anterior cingulate cortex
- Increased in thalamus
- Decreased in ventrolateral prefrontal cortex and contiguous insula
- Decreased in parietal association cortex

Cerebral Blood Flow Studies - 3

Psychomotor poverty dimension [poverty of speech, flat affect, and decreased movement] finds blood flow changes of:

- **Increased** in caudate nuclei
- **Decreased** in parietal association complex

fMRI

Functioning Magnetic Resonance Imaging finds:

- To accomplish a mental task, seems to require more areas of the brain to be involved, thus:
 - Compensatory exertion of inefficient neural circuitry during effortful task and/or
 - Abnormal connectivity in the circuitry required to perform these tasks.

Neurochemical

- Dopamine System [In the 1960s, “dopamine hypothesis” dominated theories, but people with schizophrenia have not been found to have abnormal dopamine levels.]
- Serotonin System

- Glutamate {Major interest currently as phencyclidine, antagonist of the glutamate N-methyl-D-aspartate [NMDA] receptor can cause florid, defect and cognitive signs reminiscent of schizophrenia} {Focus on glutamate system has also led to a search for abnormalities in the glial cells.}
- Gamma-aminobutyric acid [GABA], e.g., neurotransmission abnormalities
- Peptides

Psychological

- Impairment in sensory gating:
 - Unable to focus because of inability to screen
 - Increases in interference with mental tasks
 - No P50 wave suppression with repetition
- Slow reaction times
- Decreased reasoning ability
- Increased left-right confusion
- Saccadic eye movement, lack of smooth following of an object

Neurological findings

“Soft-signs:”

- Poor coordination
- Motor abnormalities

Tardive dyskinesia was noted before antipsychotic meds were used.

Lethal catatonia [“hyperpyrexia catatonic”], very similar to signs of neuroleptic syndrome, noted more than 100 years [1838] before antipsychotics were used.

Pre-morbid factors

- Older parents more likely to have a child with schizophrenia
- fetuses had increased obstetric complications, e.g., hypoxic-ischemic
- babyhood was difficult – less responsive than peers
- poor motor coordination in childhood
- speech problems
- lower educational test scores
- household moves during adolescents

History of Concepts

Weinberger

- Daniel Weinberger [GW faculty, NIMH’s Saint Es campus and now NIMH’s Bethesda campus] conceptualized neurodevelopmental model beginning with genetic predisposition expressing itself with the brain maturation processes in adolescents, a pruning of cortical neurons that results in neuronal disconnectivity. This does not mean “doomed from the womb.” There is still a place for life events to interact with the genes and fetal insult to develop the phenotype that produces the signs and symptoms.

Prevention

Since virtually all etiological agents in psychiatry have numerous manifestations, since virtually all signs and symptoms, such as delusions and hallucinations, have numerous causes, and since treatments in psychiatry tend to be non-specific, such as antipsychotic medications are useful in treating signs other than psychosis, primary prevention will be very piecemeal. For example, a hx of heavy use of marijuana has a relationship with later developing hallucinations and delusions that last longer than 6

months, meeting the dx criteria of schizophrenia. In theory, to prevent one case of schizophrenia, one would have to prevent 5,600 men from using marihuana or prevent 11,000 women from using marihuana.

As to secondary prevention, when hallucinations or delusions occur in adolescents short of meeting the dx criteria of schizophrenia, and giving these adolescents antipsychotics or omega-3s may prevent subsequent schizophrenia. Because the “may” is soft and because of ethical issues of medicating adolescents, this approach is controversial.

As to tertiary prevention, a non-stressful environment and supportive employment have strong evidence.

Diagnosis

Schizophrenia

A. Characteristic symptoms: Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated). At least one of these should include 1-3

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Catatonia
5. Negative symptoms, i.e., restricted affect or avolition/asociality

B. Social/occupational dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self-care are markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement).

C. Duration: 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 periods 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 or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

D. Schizoaffective and Mood Disorder exclusion: Schizoaffective Disorder and Mood Disorder With Psychotic Features have been ruled out because either (1) no Major Depressive, Manic, or Mixed Episodes have occurred concurrently with the active phase symptoms; or (2) if mood episodes have occurred during active-phase symptoms, their total duration has been brief relative to the duration of the active and residual periods.

E. Substance/general medical condition exclusion: The disturbance is not due to the direct physiological effects of a substance (e.g., a drug of abuse, a medication) or a general medical condition.

F. Relationship to a Pervasive Developmental Disorder: If there is a history of Autistic Disorder or another Pervasive Developmental Disorder, the additional diagnosis of Schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month (or less if successfully treated).

[Schizophrenia is NOT a split personality, is not multiple personalities.

Classification subtypes:

Schizophrenia, disorganized type, 295.1

Schizophrenia, catatonic type, 295.2

Schizophrenia, paranoid type, 295.3

Schizophrenia, residual type, 295.4

Schizophrenia, undifferentiated type, 295.90

Schizoaffective disorder, 295.70

In some settings, one is expected to use the following modifiers. They have no codes.

- Episodic with interepisode residual symptoms
- Episodic with interepisode residual symptoms with prominent negative symptoms
- Episodic with no interepisode residual symptoms
- Continuous
- Continuous with prominent negative symptoms
- Single episode in partial remission
- Single episode in partial remission with prominent negative symptoms
- Single episode in full remission
- Other pattern

In some settings, there may be two other modifiers:

Subchronic = < 2 years

Chronic = > 2 years

In settings using the multiaxial system, the above diagnoses go on Axis I along with almost all other psychiatric diagnoses except personality disorders and intellectual disability [mental retardation]. Other Axes:

Axis II.

Usually V71.09, No Diagnosis but sometimes a mental retardation dx will be appropriate and rarely a personality dx will be appropriate. Can give a personality disorder dx when it existed before the psychotic signs and persists after the psychotic signs are in remission.

Axis III.

In addition to major current medical illnesses, can list those that are impacting medication choices. Examples: glaucoma, cirrhosis.

Axis IV.

Especially interested is stating current or potential stressed.

Axis V.

See Table on next page. Note that one rates function, severity and dangerousness and then selects the lowest of the three numbers for Axis V

Scoring Axis V

Because the Global Assessment of Functioning [GAF] measures three independent factors: 1] function, 2] severity of signs and symptoms, or 3] dangerousness, one needs to consider which is more problematic. GAF, placed on Axis V, is determined by selecting the lowest of the three levels one finds on examination. For example, a person who is capable of holding a job, whose psychopathology is limited to mild insomnia, mild anorexia, and some anergy, and so forth and who is very intent on killing herself would be about 05 even though the other levels are above 50.

Do not include physical or environmental limitations in selecting a functional level. At times, one may want to specify timing of the score, such as "35 [current]," "25 [on admission]," "55 [at discharge]," "15 [lowest level during past year]," or "75 [highest level during past year]."

Note that for each category there is a range of ten. While usually a number that ends in "5" or "0" will suffice, this range does allow greater specificity when that would be useful.

Code	Functions	Signs and Symptoms	Suicidal or Homicidal
100-91	Superior in wide range of functions	No signs or symptoms	None
90-81	Good functioning in all areas. Generally satisfied with life. Socially effective.	Absent or minimal signs or symptoms. No more than everyday problems or concerns.	None
80-71	No more than slight impairment in school, occupational or social functioning	Transient signs or symptoms that would be expected with stress.	None
70-61	Some difficulties in school, occupational or social functioning, but generally functioning pretty well.	Mild signs and symptoms, e.g., mild insomnia, sad mood	None
60-51	Moderate difficulty in school, occupational or social functioning	Moderate symptoms, e.g., flat affect, occasional panic attacks.	None
50-41	Serious impairment in school, occupational or social functioning, e.g., no friend, unable to work.	Serious signs and symptoms, e.g., severe obsessional ritual, frequent shoplifting.	Suicidal or homicidal ideation
40-31	Major impairment in several areas, such as school, work, social functioning, thinking, or mood.	Some impairment in reality testing or communication, e.g., illogical or obscure speech at times.	Frequent suicidal or homicidal ideation, but not preoccupied
30-21	Inability to function in almost all areas, e.g., no job, home or friends	Behavior is influence by delusions, hallucinations, or incoherent or serious impairment in communication or judgment.	Preoccupation of hurting self or others
20-11	Occasionally fails to maintain minimal personal hygiene	Gross impairment in communications, largely incoherent, or almost mute	Some danger of hurting self or others. Frequently violent
10-01	Persistently inability to maintain minimal personal hygiene	[DSM-IV-TR says nothing about symptoms at this level other than dangerousness, but one can assume more severe than 20-11.]	Persistent danger of severely hurting self or others

"0" = inadequate information

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Disquietudes in diagnosing in psychiatry. There are two aspects of diagnosing in psychiatry that are disquieting to physicians.

1] Psychiatry has few definitions of normal, so what is seen by the profession as psychopathological can seem inexact.

2] The more the clinician finds out about the patient, the less certain a single diagnosis can seem correct. A presentation of findings that perfectly fits DSM-IV-TR criteria can raise the question as to whether the examiner got to know the patient. Restated, in some medical specialties, there is frequently a sense of “mystery solved,” but this pleasure can be infrequent in psychiatry. Finding a patient’s signs and symptoms are scattered about DSM-IV-TR does not mean that the examination is remiss. More than one diagnosis is the rule when thorough examinations are done. Furthermore, when DSM-IV-TR is adhered to, about 30% will receive the diagnosis of NOS, a dx pts and clinicians loath.

Psychopathology

Outline

- 1. Florid cognitive signs*
- 2. Conative deficits**
- 3. Cognitive deficits**
- 4. Florid mood signs***
- 5. Other signs ***
- * equals “positive signs”
- ** equals “negative signs”
- *** equals “associate signs,” signs that are important, sometimes the primary focus of treatment, but do not contribute to making the diagnosis.

Florid Cognitive Signs

- 1. Delusions, illusions or ideas of reference
- 2. Hallucinations
- 3. Disorganized or odd speech
- 4. Disorganized behavior, odd mannerisms or stereotypes
- 5. Catatonic signs
- 6. Dereistic [autistic], derealization or depersonalization

Delusions

- 73%
- = are erroneous beliefs that are held in the face of clear contradictory evidence.

- Most common: persecutory. [Content of delusions changes with the times. In this decade, for example, we are seeing pts who state they are a star of a reality show.]

Hallucinations

- 64%
- Most common: auditory
- [Certain cultural context and certain religious experiences are to be considered normal.]
- [Hypnagogic and hypnopompic are considered to be normal.]

Disorganized or odd speech

- Seen in 58% of people with schizophrenia and takes many forms [sometimes called “schizophrenic thought disorder”]. Forms include:
- 1. poverty of ideas [one or two words when an appropriate answer would be more detailed]
- 2. circumstantialities [far more details than is appropriate]
- 3. loose associations [pt switches subject frequently and the examiner cannot understand any connection between the subjects]
- 4. Flight of ideas [pt switches subject frequently and examiner can understand the connection, such as play on words]. While multiple choice questions associate flight of ideas with mania, one sees flight of ideas in people with schizophrenia too
- 5. tangentiality [pt begins to answer correctly but diverges to where the answer is incomplete and reaches material not relevant to the question]
- 6. clanging [pt selects word because it sounds like another word]
- 7. Blocking [pt stops suddenly, says “my mind went blank.” With people with schizophrenia, this meaning is different than the popular use of “blocking” to mean that one cannot recall a fact because of a dynamic.]
- 8. neologisms [pt uses words that are unique, only used by the pt]
- 9. word salad [pt mixes loose associations and neologisms = totally incomprehensible]

[One of the difficulties in psychiatry is that we have definitions of psychopathology, but not of “normal.” To communicate effectively requires an understanding of the other person’s needs, something that people with schizophrenia lack. One can note if the communications are “goal-directed” or “goal-focused,” but it often remains that it is subjective to say if the communications are “normal.”]

Disorganized behavior, odd mannerisms or stereotypes

- Seen 43% of the patients with schizophrenia, but most is mild. Severe, stereotypes, include:
- 1. stereotypy of position
- 2. stereotypy of location

- 3. stereotypy of dress
- 4. stereotypy of other actions, e.g., eating

Catatonia

- Catatonic signs:
 - Marked decrease in reactivity to environment.
 OR
 - Un-stimulated excessive motor activity
 R/O:
 1. part of a mood disorder
 2. part of somatic illness [“General Medical Disorder”]
 3. medication induced
 4. substance induced

Dereistic/autistic, derealization, or depersonalization

- 72%
- Common, but not part of DSM-IV criteria set.

Conative deficits [Conative = drives, wishes]

- 1. Alogia [= decreased use of words]
- 2. Avolition [= lack of volition]
- 3. Apathy [60%]
- 4. Anhedonia [65%] [= decrease pleasure]
- 5. Affective flattening [82%]
- 6. Ambivalence
- 7. Asociality [79%]

Cognitive deficits

- 1. Decreased attention
- 2. Decreased memory, especially when illness has become chronic
- 3. Concreteness, unable to abstract

Florid mood signs [If the pt fully meets the criteria of major depressive disorder or generalized anxiety disorder, then the pt should be given that additional dx.]

- Agitation or hostility
- Dysphoria
- Anxiety

Other signs of schizophrenia

- 1. Anosognosia-like, no insight [up to 94%, depends on definition. Many have some inkling of being ill]
- 2. Unkemptness [67%]

- 3. Decreased sensitivity to pain
- 4. Disturbed sleep patterns
- 5. Suicidal
- 6. Violent {a small percentage, but larger than rest of population}
- 7. Neophobia [fear of newness]

Differential Dx

Brief Psychotic Disorder

- Signs can be equivalent to schizophrenia, but disorder resolves in one month

Schizophreniform Disorder

- Signs of schizophrenia present for >1 month and <6 months.

Schizoaffective disorder

- Meets diagnostic criteria for either bipolar disorder or major depressive disorder *and* has signs of psychosis that are present for at least two weeks when the patient no longer meets the diagnosis of the mood disorder.

Delusional disorders

- Does not have psychopathology beyond non-bizarre delusions. “Non-bizarre” means could be true, e.g., “the CIA is following me.”

Shared psychotic disorder

- Shared psychotic disorder [folie a deux] has delusions that apparently developed from a close relationship with another person who already had that delusion.

Substance-induced psychotic disorder or induced delirium

- Practically all DSM’s substance disorders can result in psychotic signs or delirium that can resemble schizophrenia in cross section.
- Phencyclidine is seen as most likely to have schizophrenia-like psychopathology
- Long-term use of antipsychotic medications in pts who were not getting the medication for psychotic signs can develop schizophrenia, “tardive psychosis.”

Seen only after years of use, except in the elderly for whom it can develop in less than a year.

Substance-related dementias

- Substance-related dementias can resemble the deficit signs of schizophrenia.

Bipolar Disorder

- Bipolar disorders with psychotic features are bipolar disorder even though they may have all the signs of schizophrenia. See schizoaffective disorder, *supra*. Also, bipolar disorder with catatonia can look like schizophrenia. The research community sees a lot of similarities between the schizophrenia and psychotic bipolar disorder, but present distinction is likely to continue in DSM-5 [2013].

Major depressive disorder

- Major depressive disorder with psychotic features or major depressive disorder with catatonia can resemble schizophrenia.

Borderline personality disorder

- Borderline personality disorder can have transient psychotic disorder.

Paranoid personality disorder

- Not delusional.
- No hallucinations
- {If present well before onset of schizophrenia, can include adding “[premorbid]” after the diagnosis, “Paranoid personality disorder [premorbid]}”}

Schizoid personality disorder

- Not psychotic, not catatonic.
- {If present well before onset of schizophrenia, can list and add “[premorbid].”}

Schizotypal personality disorders

- Not psychotic, not catatonic.
- If present well before onset of schizophrenia, can add this diagnosis with “[premorbid].”

Narcissistic personality disorder

- Grandiose sense of self doesn’t reach the definition of a delusion.

Psychotic disorder due to a general medical condition

- Most of these are neurological or endocrine illnesses

Neurological considerations

- Central nervous system neoplasms
- Central nervous system infections
- Epilepsy
- Multiple sclerosis
- Huntington’s disease
- Sensory deficits, such as deafness

Endocrine disorders

- Hyperthyroidism
- Hypothyroidism
- Hypoparathyroidism
- Hyperparathyroidism
- Metabolic conditions
- Hepatic diseases
- Renal disease
- Autoimmune disorders with central nervous system involvement

Catatonic disorders associated with general medical conditions

- Brain cancers
- Head trauma
- Strokes
- Encephalitis
- Hypercalcemia

- Hepatic encephalitis
- Homocystinuria
- Diabetic ketoacidosis

Medication-induced movement disorder

- Neuroleptic-induced:
 - Parkinsonism
 - Neuroleptic malignant syndrome [R/O Lethal catatonia]
 - Acute dystonia
 - Akathisia
 - Tardive dyskinesia
 - Postural tremor

Vascular dementia with delusions

- Age and neurological signs usually quickly rule this out.

Psychotic disorder, NOS

- Not-otherwise-specified [NOS] psychotic disorder is a common diagnosis. If a patient doesn't quite make the diagnosis of schizophrenia, this diagnosis is preferable to stretching "Schizophrenia."

Occurrence of Schizophrenia

- 1. Prevalence: 0.5-1.5% worldwide
- 2. Incidence: 0.005-0.05%/year
- 3. Higher in Western cultures
- 4. Higher in urban settings [**Urbanization** is one of the most common epidemiological findings. Include both born in cities and moved to cities. Controversial is concept that ethnic diversity in the given urban community increases the risks.]
- 5. Higher in lower social classes
- 6. Higher in rate of being single.
- 7. If ever married, higher rate of divorce.
- 8. Higher in first born
- 9. Higher in those born between January and March in Northern Hemisphere; higher in those born between July and September in Southern Hemisphere
- 10. Ten times higher in first-degree biological relatives.
- 11. If one parent has schizophrenia, then 5% chance child will have schizophrenia.

- 12. If both parents have schizophrenia, then about 50% chance that child will have schizophrenia.
- 13. If sibling has schizophrenia, then for each sibling, there is a 10% risk having schizophrenia.
- 14. If non-identical [dizygotic] twin has schizophrenia, then 10% risk of having schizophrenia.
- 15. If identical [monozygotic] twin has schizophrenia, then 50% chance of having schizophrenia.
- 16. Onset, late teens to early thirties. Ninety percent have onset between 10 and 55 years old [so 10% have childhood or late onset type]

Gender Differences

- Women:
 - slightly less likely to have schizophrenia
 - have a better history of pre-morbid functioning
 - older at onset of illness, men between 18-25 y/o and women between 25-35 y/o, with onset after 40 not unusual.
 - florid signs more prominent
 - deficit signs are less prominent
 - less likely to be married
 - better prognosis

Prognosis

Prognosis-DSM-IV-TR

- *“Most studies of course and outcome in schizophrenia suggest that the course may be variable, with some individuals displaying exacerbations and remissions, whereas others remain chronically ill. Because of variability in definition and ascertainment, an accurate summary of the long term outcome of schizophrenia is not possible.”*

Prognosis-traditional view

- 1/3 recover
- 1/3 improve but continue with substantial deficits or exacerbations
- 1/3 deteriorate

Prognosis-Course

- Traditional view:
 - first decade or so, fluctuating course
 - second decade or so, stable course
 - third decade and beyond, some improvement

After first episode, chances that the pt will never have another psychotic episode are between 10 and 20%.

After pt has been on medications for a year, then discontinued, the chances of a recurrence in a year are 2/3. If medications are continued, chances of a recurrence are 1/3.

Prognosis-Life Expectancy

- Die 25 years earlier than the rest of the population because of:
 - Higher suicide rate
 - Higher accident rate
 - Less adequate medical care.

Higher rate of death from cardiovascular disorders and infections. Lower rate of death from cancer.

Prognosis-Suicide

- DSM-IV-TR [a major source of multiple-choice questions] suggests 10% die of suicide, and more recent data suggests 5%.

Mortality

- Recent data suggests that three out of five people with schizophrenia die prematurely from non-psychiatric medical conditions. Overall, they die 25 years younger than the general population.

Prognostic Factors in Schizophrenia [See pre-morbid factors above]

Positive finding

Negative finding

Country Where Illness Is Taking Place

Less developed country

Highly developed country

Family Hx of Mental Illness

Family hx of mood disorder

Schizophrenia hx in family

No family hx of mental disorder

Mother's Pregnancy

No problems

Problematic

Female

Gender

Male

Not remarkable

Early Years

Problematic:

- Parent-child interactions
- Motor coordination
- Speech
- Education test scores

Social Status

High social status

Low social status

Pre-morbid Adjustment

Good pre-morbid adjustment

Poor pre-morbid adjustment

Good educational hx

Poor work in school

Good psychosexual adjustment

Poor psychosexual hx

Married

Never married

Steady work history

Poor work history

Hx of Illness

Older age at onset

Younger age at onset

Stress-induced onset

No known stress

Acute onset

Insidious onset

Episode if acute

Episode has long duration

After psychotic episode, no residual signs

Has residual signs

No prior psychiatric history

Previous psychiatric history

Mental Status

Emotional

Emotional blunting

Confusion

Not confused

Not assaultive

Assaultive

Not obsessive

Obsessive

Examinations

Normal neurological exam

Neurological abnormalities

Normal brain scan

Abnormal brain scan

Suicide Among People with Schizophrenia

Increase in those who:

- 1) Are young
- 2) Have history of good education attainments
- 3) Have been ill < 6 years
- 4) Have a substance-related co-occurring disorder
- 5) Are recently stressed

- 6) *Have been recently discharged from the hospital, especially high rate during first week after discharge*
- 7) Have recently relapsed
- 8) Have mental findings of:
 - a) Hopelessness
 - b) Pessimism
 - c) Feeling inadequate
 - d) Wishes to attain full recovery
 - e) Insight that consists of knowing they are ill, knowing what the illness has done to them, and know their prognosis.

[Presence of command hallucinations is controversial. There is the tradition that command hallucinations increase the chances of suicide, yet some empirical studies find that is not so.]

Violence of People with Schizophrenia

While most people with schizophrenia are not violent, these people have a higher risk of violence than the normal rates. [Advocates of the need for involuntary treatment highlight the higher risk, believing that it is established that receiving treatment are no more dangerous than the general population.]

Increase in those who are:

- Male
- Poor
- Relatively uneducated
- Relatively unskilled
- Single
- Prior arrests
- Prior violence
- Substance florid signs:
 - Distressing delusions
 - Distressing hallucinations, e.g. command type
- Substantial akathisia from medications
- Suicidal
- Co-occurring disorders:
 - Substance-related disorders

Most likely target: relatives

Psychiatric Management of Schizophrenia

It is rare that satisfactory management of this illness does not include medications, psychological techniques **and** social approaches. The treatment goal is often less than complete removal of signs of the

		<u>Range Mg/d</u>	<u>life/ hours</u>	
Aripiprazole**	Abilify	10-30	75	Has relatively attractive side-effect profile, but use in adolescence is associated with weight gain, sometimes > 20 lbs. Also used in bipolar I disorder and in Major Depressive Disorder
Asenapine	Saphris	5 – 20	24	FDA approved in 2009 for schizophrenia and for bipolar I disorder. Side effects similar to other second generation. Has to be given sublingual. Might be attractive to pts who are phobic about swallowing meds.
Chlorpromazine*	Thorazine	300-1,000	6	First antipsychotic [1952]. Used when sedation is needed. Has IM form.
Clozapine**	Loxapine*	Loxitane	30-100	1. Used after two other antipsychotic medications have failed. 2. Use when suicidal behavior is not controlled by other approaches. 3. Use when tardive dyskinesia is present.
Fluphenazine*	Prolixin	5-20	33	Has long-lasting IM version
Haloperidol*	Haldol	5-20	21	Has short- and long-lasting IM version. Less sedation and more EPS than most antipsychotics. IM version has been very common choice to address agitation. Also used for Tourette's.
Iloperidone**	Fanapt	6-24		Antipsychotic FDA approved in 2009 and has had limited use so far, so exactly where it will fit into algorithms is not clear. If using, watch especially for orthostatic hypotension.
Loxapine*	Loxitane	30-100	4	Often a useful additional antipsychotic medication when the primary antipsychotic results are only partially successful.
Lurasidone**	Latuda	40-80 mg/d		FDA approved in November, 2010. Early information suggests that side effect profile will be like risperidone.
Mesoridazine*				Only listed here to say it is no longer available
Molindone*	Moban	30-100	24	While never a frequent choice, there are pts who have done poorly with many antipsychotics, and did well with this one.
Olanzapine**	Zyprexa	10-30	33	Has done well in head-to-head with other antipsychotics, except against clozapine. Used in Bipolar I Disorder. Metabolic syndrome a major concern. Has been the target of more successful law suits than any medication in psychiatry.
Paliperidone**	Invega	3-15	24	Very close chemically to risperidone.
Perphenazine*	Trilafon	16-64	10	In studies in the past decade, has seemed about equal to the second generation antipsychotic medications.
Quetiapine**	Seroquel	300-800	6	Very common used in this decade. Used in Bipolar I Disorder as an adjunct. In some setting, e.g., prisons, has become a drug of misuse.

Risperidone**	Risperdal Consta	2-8	24	Is used in Bipolar I Disorder. Has long-acting IM version
Pimozide*	Orap	2-10	55	Listed only to be complete. Almost never used in psychiatry
Thioridazine*	Mellaril	300-800	24	In 1960s, most commonly used antipsychotic. Low EPS. Today, major Q-T concerns have reduced its use to those pts who did well on this medication in the past. Must not exceed 800/d because of potential to damage retina.
Trifluoperazine*	Stelazine	15-50	24	Very common choice in 1960s. FDA approved for Generalized Anxiety Disorder.
Ziprasidone**	Geodon	12-200	7	Relatively attractive side-effect profile. Is also used for mania.

* = Typical or first generation antipsychotic
 ** = Atypical or second generation antipsychotic

Medications used with people with schizophrenia are found to have similar efficacy in clinical trials, although the individual patient's response can vary enormously. The initial medication selection is usually based on which side effects the clinician is most eager to avoid. To avoid metabolic risk [common side effect of clozapine, olanzapine, thioridazine, risperidone, quetiapine, chlorpromazine] use perphenazine, aripiprazole, molindone, fluphenazine, haloperidol, or ziprasidone. To avoid extrapyramidal side effects, select second generation antipsychotics.

The following is from the Texas Dept of State Health Services

Algorithm for the Treatment of Schizophrenia

FGA = First generation antipsychotic
 SGA = Second generation antipsychotic
 ECT = electroconvulsive therapy

Choice of antipsychotic should be guided by considering the clinical characteristics of the pt and the efficacy and side effect profiles of the medications.

Any stage/s can be skipped depending of clinical picture or history of antipsychotic failure and returning to an earlier stage may be justified by history of past response.

Stage 1: [First episode pts usually require lower doses of antipsychotic medications and should be closely monitored due to greater sensitivity to medication side effects.]

Trial of a single SGA

If partial or non-responsive to Stage 1, then **Stage 2**: Trial of another SGA or a FGA.

If partial or non-responsive to Stage 2, then **Stage 3**: Clozapine

If partial or non-responsive to Stage 3, then **Stage 4**: Clozapine and FGA, SGA or ECT [at this point, one is beyond RCT [=Random Control Trials]

If non-responsive, then **Stage 5**: Trial of a single agent not tried in Stage 1 or Stage 2.

If non-responsive, then **Stage 6**: Combination therapy such as an SGA and FGA, such as FGA/SGA & ECT, such as FGA/SGA and a mood stabilizer.

If pt is inadequately adherent at any stage, the physician should assess and consider a long-acting antipsychotic preparation, such as fluphenazine decanoate, haloperidol decanoate, or risperidone microspheres.

A treatment refractory evaluation should be performed to reexamine dx, substance abuse, medication adherence, and psychosocial stressors. Cognitive Behavioral Therapy or psychosocial augmentation should be considered.

Whenever a second medication is added to an antipsychotic [other than clozapine] for the purpose of improving psychotic symptoms, the pt is considered to be in Stage 6.

Management by Sign [percentages are present of that sign in patients with schizophrenia]

SIGN	MANAGEMENT
Delusions [73%]	Antipsychotic med. Agree delusions are problematic without agreeing they are true. Supportive psychotherapy. Cognitive-behavioral therapy. Admire with the patient really <i>is</i> . Supported employment.
Hallucinations [64%]	Antipsychotic med. Try to identify triggers. Suggest task that use larynx. Cognitive-behavioral therapy. Supported employment.
Disorganized speech [58%]	Antipsychotic med. Reassure orally even if the patient’s communications are incomprehensible.
Disorganized behavior [43%]	R/O akathisia. Antipsychotic med
Catatonia	Antipsychotic med. Benzodiazepine. Reassure orally even if patient is mute. Uncommon: ECT. Uncommon: Amytal interview.
Dereistic/autistic [72%]	Antipsychotic med. Activity therapies. Supported employment.
Conative deficits [e.g., apathy], [82%]	R/O Medications effects. No proven treatment, but still, consider: cognitive-behavioral therapy; social skills training; activity therapies; supported employment. Family psycho-education may improve these signs.
Cognitive deficits	R/O medications side effects. Frequently repeated basics information in sessions, such as date, place and persons. Supported employment.
Agitation	R/O akathisia. “talking down.” Consider hospitalization. Antipsychotics, especially

	haloperidol, risperidone, or olanzapine. Benzodiazepines, especially lorazepam or klonopin are commonly used. Propranolol and droperidol are used in face and benzodiazepine failure.
Dysphoria	Antipsychotic in usually given as extensive trial before one adds a benzodiazepine.
Anosognosia [94%]	Rather than attempt to persuade the patient that they have an illness, identify practical reasons that the treatments help.
Unkemptness [67%]	Work with patient's caregiver to reduce. Praise what neatness and cleanliness there is.
Insomnia	If antipsychotic in effectively addressing other signs, but not reducing insomnia, consider adding small dose of sedating antipsychotic h.s.
Suicidal	Monitor for risk factors. R/O akathisia. Consider hospitalization. Consider clozapine.
Violent	Monitor for risk factors. R/O akathisia. Identify triggers. Consider hospitalization. Same meds as agitation <i>supra</i> .
Neophobia	Other factors being equal, avoid change. When change is indicated, anticipate neophobia, explaining need to the patient and work with care-givers on addressing this hurdle.
Decreased sensitivity to pain	Important to consider when attempting to diagnosis and manage. Pt's report as to lack of pain can mislead.

Therapeutic Physician-Patient Relationship

Patient-physician Relationship—General

- 1. Don't interview if you don't feel safe
- 2. Other factors being equal, interview the patient alone.
- 3. Select quiet site for interview with a minimum of stimulations. If sounds take place, may be useful to explain to the patient if source of noise is not obvious.
- 4. If at bedside, don't stand. Find a chair and sit.
- 5. If sitting and patient is restless or hyperactive, periodically both take a break and stand.
- 6. Have frequent eye contact without staring. Can reduce sense of staring by switching eye you look at.
- 7. Be calm. Be matter-of-fact.
- 8. Be consistent.
- 9. Frequent repetitions may be indicated.
- 10. Don't touch until after you have told patient that you are going to touch the patient.
- 11. Accept the patient as a person, about whom you are interested and concerned, but don't accept all behaviors, thoughts or feelings.
- 12. Be concrete. Use nouns, not pronouns.
- 13. If disoriented, orient and repeat periodically.
- 14. Avoid embarrassing the patient, e.g., avoid competing with the patient.
- 15. Laughter is limited to laughing with the patient.
- 16. If possible, before session ends, find something to praise, e.g., 1] came to clinic, or 2] praising talking about feelings instead of taking untoward actions.
- 17. Look for decisions that you can leave to the patient, usually simple decisions.

- 18. Avoid promises you can't keep. Better to say: "I will ask your Social Worker, Mrs. Smith,* to begin the process of finding out if you are eligible for SSDI. If you qualify, you'll get some money each month, but we will not know for many months if you are qualified.
- * note, "Mrs. Smith," as "Social Worker" alone may not work for the patient.
- 19. Spend some time on interest of the patient: gardening?, food?, Redskins?, cars?, TV programs?, and so forth. Have some "real" conversations.
- 20. Not just questions, converse.
- 21. Be concrete about when you will again see the patient.

Managing Delusions.

- 1. Clarify meaning of the ideas and monitor, but don't suggest this is what is important about the patient.
- 2. Look for needs in the delusions that might be met in other ways.
- 3. Clarify what the patient intends to do about the idea. If dangerous act is implied, state that the dangerous act is not necessary or would be a mistake.
- 4. Can agree that the ideas are problems for the patient without agreeing they are true. Can agree to disagree.
- 5. Can bring up contrary facts to clarify the patient's thinking, but avoid arguing with the patient.

Example

- Pt: "I could have been a better doctor than you, but they took out my brain."
- Response might be something like, "You have had a very difficult time trying to be who you want to be, and working with [name people on treatment team] can help you reach some of your goals." This avoids arguments and uses his comment to reflex on treatment plan.

Managing Hallucinations

- 1. Clarify content to ascertain dangerousness.
- 2. Don't argue.
- 3. Agree that they are a problem for the patient even though not heard by others.
- 4. Ascertain circumstances when the voices occur.
- 5. Suggest methods or circumstances that can help limit the occurrence of the voices.
- 6. May be able to introduce the concept that "your mind may be playing tricks on you."
- 7. Don't imply that the voices are what are important about the patient.

Managing Disorganized or Odd Speech

- 1. Highly structure the interview.

- 2. Tell the patient that you know it is difficult for him/her to express him/herself, and you want to help with that problem.
- 3. Reward adequate communications with interest or even enthusiasm.

Managing Disorganized or Odd behavior

- Monitoring the behaviors can include asking the pt why the behaviors, but do not dwell on this. Instead, focus on what is not organized, what is not stereotypy. While cautioning the patient about harmful behaviors, look for opportunities to be enthused about appropriate behaviors.

Managing Catatonia

- While monitoring the catatonia, find some topics to discuss. If mute, tell the patient that we [use nouns for other treatment team members] are here to help. Example. "I am Dr. Smith, your physician here. Mrs. Jones is a medical student here. You are at the Northern Virginia Mental Health Institute. You are safe here. Mrs. Jones and I are here to help you and let us know at any time what you need."

Managing Defective signs

- Be engrossed in any smidgen of interests that the patient has. Has interests in clothes, cars, flowers, sports, pets? Whatever. Show an interest and have some discussion of the topic focusing on the pt's views, but make it a conversation, not just a series of questions.
- Have real conversations.

Two Cases with far different outcomes:

"Joe" (1901-1988) Slow learner in school and friendless, began saying the devil was talking to him when he was 15. Voices kept him distracted from communicating with family and school-mates. Voices would occasionally be the his justification for stealing money from his mother and neighbors, that the devil told him to do so. Because of his stealing, because of his referrence to voices and because of his speech that was often incomprehensible, he was admitted to Saint Elizabeths when 17 years old. He was placed on wards where he lived a highly regulated live with little independence and little stimuli. He gradually deteriorated, spending his days talking to himself, often making sounds, not words. He needed prompting to take care of his needs, was unkempt unless staff dressed and bathed him. Showed almost no interest in anything other than cigarettes, asking for cigarettes or a light being his only communication with other pts. Was featured in the Washington Post, 1985, as an example of why there needs to be an asylum for some people with mental illness. Died, 1988 of pneumonia in his 71st year at Saint Es.

John Forbes Nash, Jr. (born 1928) As a child, different, bright, took college courses in high school, obtained BA and Masters in mathematics, age 20, and created two popular games, Hex and Nash. His adviser in college wrote one sentence when Princeton ask for a reference: "This man is a genius." At Princeton, age 22, he earned a doctorate in 1950 with a 28 page dissertation on non-cooperative games. The thesis, contained the definition and properties of what would later be called the "Nash Equilibrium." In his late 20s, Nash began to show signs of extreme paranoia and erratic behavior, believing that there was an organization chasing him, in which all men wore "red ties". Nash mailed letters to foreign embassies in Washington, D.C., declaring that he was establishing a world government. He was involuntarily committed to the McLean Hospital, April–May 1959, where he was diagnosed with paranoid schizophrenia and mild clinical depression. Upon his release, Nash resigned from MIT, withdrew his pension, and went to Europe, unsuccessfully seeking political asylum in France and East Germany. He tried to renounce his U.S. citizenship. After a problematic stay in Paris and Geneva, he was arrested by the French police and deported back to the United States at the request of the U.S. government. In 1961, Nash was committed to the New Jersey State Hospital at Trenton. Over the next nine years, he was in and out of psychiatric hospitals, where besides receiving antipsychotic medications, he was administered insulin shock therapy. Although he took prescribed medication, Nash wrote later that he only took it either involuntarily or under pressure. After 1970, he was never committed to the hospital again and refused any medication. According to Nash, the film *A Beautiful Mind* inaccurately showed him taking new atypical antipsychotics during this period. He attributed the depiction to the screenwriter (whose mother, he notes, was a psychiatrist), who was worried about encouraging people with the disorder to stop taking their medication. Nash recovered gradually with the passage of time, being in a communitarian setting where his eccentricities were accepted. Recovery, some feel, was "just a question of living a quiet life." Nash dates the start of what he terms "mental disturbances" to the early months of 1959 when his wife was pregnant. He has described a process of change "from scientific rationality of thinking into the delusional thinking characteristic of persons who are psychiatrically diagnosed as 'schizophrenic' or 'paranoid schizophrenic'"including seeing himself as a messenger or having a special function in some way, and with supporters and opponents and hidden schemers, and a feeling of being persecuted, and looking for signs representing divine revelation. Nash has suggested his delusional thinking was related to his unhappiness, and his striving to feel important and be recognized, and to his characteristic way of thinking such that "I wouldn't have had good scientific ideas if I had thought more normally. Nash reports that he did not hear voices until he was 36 y/o. Later he learned to reject the voices. Only gradually on his own did he "intellectually reject" some of the "delusionally influenced" and "politically-oriented" thinking as a waste of effort. However, by 1995, he felt that although he was "thinking rationally again in the style that is characteristic of scientists." In 1994, he received the Nobel Memorial Prize in Economic Sciences (along with two others) as a result of his game theory work as a Princeton graduate student. Nash has suggested hypotheses on mental illness. He has compared not thinking in an acceptable manner, or being "insane" and not fitting into a usual social function, to being "on strike" from an economic point of view. He has advanced evolutionary psychology views about

the value of human diversity and the potential benefits of apparently nonstandard behaviors or roles.