COMMUNITY HEALTH CHOICE

SCHIZOPHRENIA

Practice Guidelines for the Treatment of Patients With Schizophrenia Second Edition
Canadian Practice Guidelines for Comprehensive Community Treatment for Schizophrenia and Schizophrenia Spectrum Disorders
https://www.nami.org/NAMI/media/NAMI-Media/Images/FactSheets/Schizophrenia-FS.pdf
Violence Risk Assessment
Adult Mental Health | Texas Health and Human Services
Texas HHS: Coordinated Specialty Care for 1st Episode Psychosis

Overview:

Schizophrenia is a mental illness characterized by psychotic symptoms which are not associated with drug intoxication, an acute brain disease or delirium, a mood state (such as mania or depression) or trauma. Schizophrenia is a diagnosis of exclusion, only considered once common causes of psychotic presentations have been ruled out.

Schizophrenia is only diagnosed once symptoms or prodromal presentation have been present for over 6 months. Schizophrenia has consistently affected approximately 1 % of adults with women equally likely to be affected. Interestingly, women's symptoms of schizophrenia may be less functionally impairing. While this may be due to altered tendencies toward aggression . More likely, however, attenuated symptoms in women are likely related to the later age at which Schizophrenia usually presents in women (age 27 + as opposed to 22). Developing symptoms later on in life means that women with schizophrenia are more likely to have completed college, been married, or started a family. Women with schizophrenia seem to benefit from this added maturity and a more settled life at the time of diagnosis.

While the cause of Schizophrenia remains unclear, there is a higher risk of the disease in those with a history in their immediate family, suggesting that it is in part genetically mediated. At the same time, Schizophrenia is more likely to be diagnosed following a high stress and/or transitional period in an individual's life, suggesting that stressors are also important to the development of symptoms. This model which suggests that the cause of the disorder is secondary to a dynamic interplay between inherent, genetic factors, and the individual's life, stress and environment is referred to as the stress diathesis model. There is no evidence to support that parenting style is responsible for the development of schizophrenia.

Criteria and Diagnosis:

Although there are numerous abnormalities in the brain structure and function of individuals with schizophrenia, there is no single condition that can be tested or measured to produce a definitive diagnosis. Without such measures, the disease is diagnosed by its symptoms.

Prior to a medical diagnosis, it is critically important that a doctor rule out other problems that may mimic schizophrenia, such as psychotic symptoms caused by the use of drugs or other medical illnesses; major depressive episode or manic episode with psychotic features; delusional disorder (no hallucinations, disorganized speech or thought or "flattened" emotions) and autistic disorder or personality disorders (especially schizotypal, schizoid, or paranoid personality disorders). Schizoaffective disorder is a diagnosis used to indicate that the person has an illness with a mix of symptoms of both schizophrenia and bipolar disorder.

"Although there is no single symptom that is found only in schizophrenia, there are several that are found very uncommonly in diseases other than schizophrenia," Dr. Torrey writes in Surviving Schizophrenia, now in its sixth edition as the authoritative book on the subject. "When they are present they should elevate the index of suspicion considerably…."

Precise diagnosis is of "utmost importance," he writes. "It both determines the appropriate treatment for the patient and provides the patient and family with an informed prognosis. It also makes research on the disease easier because it allows researchers to be certain they are talking about the same thing." It is important to diagnose and treat schizophrenia as early as possible to help

people avoid or reduce frequent relapses and re-hospitalizations. Several promising, large-scale studies suggest early intervention may forestall the worst long-term outcomes of this devastating brain disorder.

Because it is a diagnosis of exclusion, a number of screening exams and labs must be assessed prior to making the determination that an individual with psychotic symptoms has a diagnosis of Schizophrenia. Blood tests are done to rule out: substance intoxication, infection or sepsis, evidence of cancer or leukemia, severe hormonal anomalies (such as hypothyroidism or hyperparathyroidism) and an analysis for syphilis are the norm (as syphilis causes acute cognitive symptoms in its later stages). Some physicians will also order immune testing to assess for Lupus, another condition associated with later stage cognitive changes. If family history, atopia, or a history of symptoms and rashes suggest the possibility of an autoimmune condition, antibody testing such as an ANA are recommended. An MRI scan is nearly always ordered, in order to rule out mass lesions, cerebrovascular anomalies, or infections which might account for psychotic symptoms. Toxoplasmosis, for example, is readily identified on MRI and may present with devastating neurological and psychiatric symptoms in the context of active AIDS.

Some of the testing which is most often included in the work up for first episode psychosis include:

- Imaging: MRI +/- CT.
- CBC: r/o infection, unexpected anemia etc
- Concerns re: CNS infection may prompt lumbar puncture, but this is rare
- Chemistry with electrolytes as anomalies can cause seizures, sedation, excitement, etc
- Liver function tests (bilirubin → cognitive changes) also want these for starting medications
- Kidney function
- Urinalysis, Urine culture and sensitivity- UTI's can cause psychosis or delirium, especially in older individuals.
- Urine and or blood drug screenings (check everything)
- Syphilis RPR
- ANA on occasion cases/where suspect
- Thyroid panel with antibody screen if abnormal

Some clinicians will screen for heavy metals when clinically suspect or family history.

For a deeper understanding of the medical workup typically done in the context of First Episode Psychosis, see the following article: Differential Diagnosis of Psychotic Symptoms - Medical Mimicry

When considering the myriad of drug reactions or misuse both illicit and prescription which can contribute to psychosis, the list is a long one. A most comprehensive discussion can be found here: https://secure.medicalletter.org/w1301c

For a discussion of the most common offending drugs in the primary care setting, see:
Psychiatric Side Effects of Medications in a Primary Care Center

Symptoms of Schizophrenia

In healthy people, the brain functions in such a way that incoming stimuli are sorted and interpreted, followed by a logical response (e.g., saying "thank you" after a gift is given, realizing the potential outcome of arriving late to work, etc.). Conversely, the inability of patients with schizophrenia to sort and interpret stimuli and select appropriate responses is one of the hallmarks of the disease.

The symptoms of schizophrenia are generally divided into three categories: positive, negative and cognitive. The National Institute of Mental Illness (NIMH) publishes the following about the three categories of symptoms:

Positive symptoms: "Positive" symptoms are psychotic behaviors not generally seen in healthy people and are symptoms which are"added on" to those with psychosis. People with positive symptoms may "lose touch" with some aspects of reality. Symptoms include:

- Hallucinations
- Delusions

- Thought disorders
- Movement disorders (agitated body movements)

Negative symptoms: "Negative" symptoms involve the loss of normal cognitive or neurological functions, such as a loss of emotional response or motivation. These losses are associated with disruptions to normal emotions and behaviors. Symptoms include:

- "Flat affect" (reduced expression of emotions via facial expression or tone of voice tone)
- Reduced feelings of pleasure in everyday life
- Difficulty beginning and sustaining activities Reduced speaking

Cognitive symptoms: For some patients, the cognitive symptoms of schizophrenia are subtle, but for others, they are more severe and patients may notice changes in their memory or other aspects of thinking. Symptoms include:

- Poor "executive functioning" (the ability to understand information and use it to make decisions)
- Trouble focusing or paying attention
- Problems with "working memory" (the ability to use information immediately after learning it)
- Other symptoms of psychosis may include:
- Disorganized speech.
- Incoherent thoughts.
- Lethargy.
- Emotional changes (lack of emotion, difficulty expressing emotion, etc.).
- Antisocial behavior.
- Erratic behavior (sometimes violent and/or dangerous).
- Drugs That Can Cause Psychosis
- Heavy, long-term use of many substances can result in psychotic symptoms. However, certain drugs are more likely to cause psychotic symptoms than others. These include:

Common Themes of Delusions

Each person's personality, family background, and culture affect the delusion they have. There are a lot of different themes, but some show up more often than others:

- Persecution: This is based on the idea that a person or object is trying to hurt you or work against you.
- Infidelity: This involves unusual jealousy or possessiveness toward another person.
- Love: This is an obsessive love that takes over all other thoughts or an idea that someone famous or unknown is in love with you.
- Religion: Delusions of this kind aren't necessarily caused by zealous belief but more by the environment in which the person lives.
- Guilt or unworthiness: This theme is common in people with depression.
- Grandiose: This is when a person feels that they themselves, certain objects, or specific situations are crucially important, powerful, or valuable.
- Negation or nihilistic: This theme involves intense feelings of emptiness.
- Somatic: This is a false belief that the person has a physical issue or medical problem.
- Mixed: This is when a person is affected by delusions with two or more themes.

While there is no cure for schizophrenia, it is a highly treatable disorder. In fact, according to the National Advisory Mental Health Council, the treatment success rate for schizophrenia is comparable to the treatment success rate for heart disease. People who experience acute symptoms of schizophrenia may require intensive treatment, sometimes including hospitalization, to treat severe delusions or hallucinations, serious suicidal inclinations, inability to care for oneself or severe problems with drugs or alcohol.

It is critical that people with schizophrenia stay in treatment even after recovering from an acute episode. About 80 percent of those who stop taking their medications after an acute episode will have a relapse within one year, whereas only 30 percent of those who continue their medications will experience a relapse in the same time period. Because the causes of schizophrenia are still unknown, treatments focus on eliminating the symptoms of the disease. Antipsychotic drugs typically are used in the treatment of schizophrenia because they help relieve the positive symptoms. No treatments exist for negative symptoms of the disease.

The NIMH publishes the following on treatments and therapies for schizophrenia:

> **Antipsychotic medications:** Antipsychotic medications are usually taken daily in pill or liquid form. Some antipsychotics are injections that are given once or twice a month. Some people have side effects when they start taking medications, but most side effects go away after a few days. Doctors and patients can work together to find the best medication or medication combination, and the right dose. Up-to-date information on medication use and side effects can be found on the U.S. Food and Drug Administration (FDA) website, including the latest information on warnings, patient medication guides, or newly approved medications.

> **Psychosocial treatments:** These treatments are helpful after patients and their doctor find a medication that works. Learning and using coping skills to address the everyday challenges of schizophrenia helps people to pursue their life goals, such as attending school or work. Individuals who participate in regular psychosocial treatment are less likely to have relapses or be hospitalized. For more information on psychosocial treatments, see the Psychotherapies webpage on the NIMH website.

> **Coordinated specialty care (CSC):** This treatment model integrates medication, psychosocial therapies, case management, family involvement and supported education and employment services, all aimed at reducing symptoms and improving quality of life. The NIMH Recovery After an Initial Schizophrenia Episode (RAISE) research project seeks to fundamentally change the trajectory and prognosis of schizophrenia through coordinated specialty care treatment in the earliest stages of the disorder. RAISE is designed to reduce the likelihood of long-term disability that people with schizophrenia often experience and help them lead productive, independent lives. In Texas, see the following resources: Coordinated Specialty Care for First Episode of Psychosis | Texas …

Schizophrenia and Mortality
Individuals with schizophrenia die at a younger age than do healthy people. Males have a 5.1 greater than expected early mortality rate than the general population, and females have a 5.6 greater risk of early death. Suicide is the single largest contributor to this excess mortality rate, which is 10 to 13 percent higher in schizophrenia than the general population.

Suicide is in fact the number one cause of premature death among people with schizophrenia, with an estimated 10 percent to 13 percent killing themselves. The extreme depression and psychoses that can result due to lack of treatment are the usual culprits in these sad cases. These suicides rates can be compared to the general population, which is somewhere around 0.01%. Other contributors to excess mortality include:

> **Accidents:** Although individuals with schizophrenia do not drive as much as other people, studies have shown that they have double the rate of motor vehicle accidents per mile driven. A significant but unknown number of individuals with schizophrenia also are killed as pedestrians by motor vehicles.

> **Diseases:** There is some evidence that individuals with schizophrenia have more infections, heart disease, type II (adult onset) diabetes, and female breast cancer, all of which might increase their mortality rate. Individuals with schizophrenia who become sick are less able to explain their symptoms to medical personnel, and medical personnel are more likely to disregard their complaints and assume that they are simply part of the illness. There also is evidence that some persons with schizophrenia have an elevated pain threshold so they may not complain of symptoms until the disease has progressed too far to be treatable.

Homelessness: Although it has not been well studied to date, it appears that homelessness increases the mortality rate of individuals with schizophrenia by making them even more susceptible to accidents and diseases.

- ✧ Torrey, E. Fuller. (2013). *Surviving Schizophrenia: A Family Manual (*sixth edition). New York: Harper Perennial.
- ✧ The National Institute of Mental Illness (NIMH): Schizophrenia overview
- ✧ Treatment Advocacy Center. (2015). Clozapine for Treating Schizophrenia: A Comparison of the States (note scroll down ½ page to Clozapine for…)

NOTE (see below for more): Clozapine is a SUPERIOR medication in the treatment of Schizophrenia despite its well-publicized, real and challenging risks. Note too, Texas has lowest utilization at 2-3% practice pattern.

- Schizophrenia is one of the most disabling psychiatric disorders and affects approximately 2.6 million American adults. Clozapine is regarded as the "gold standard" for treating schizophrenia. It is the only antipsychotic approved for treating the 20 to 30 percent of patients who do not respond to other medications, and especially those who are suicidal or violent. Although it is used to treat 20 percent or more of individuals with schizophrenia in most developed countries, its use in the United States is less than 5 percent. According to one schizophrenia expert, it should be used to treat at least 10 percent of individuals with schizophrenia who are being treated at a "bare minimum."
- Using data from Medicaid and pharmacy prescriptions, we ascertained clozapine use for all 50 states and compared them as a measure of the states' efforts to treat individuals with schizophrenia.
  - o Only six states achieved the "bare minimum" of 10 percent use: South Dakota, Connecticut, Colorado, Washington, Vermont and Maine.
  - o The states that were using the least clozapine—to treat less than 3 percent of individuals—were Georgia, Kentucky, North Carolina, Mississippi, Alabama, Arizona, Louisiana, Nevada and Oregon.
- Clozapine is usually prescribed by psychiatrists, rather than other physicians, but psychiatrists are very unevenly distributed by state. Therefore, we also examined clozapine use taking into consideration the availability of psychiatrists.
  - o When availability of psychiatrists is also considered in clozapine use, South Dakota was by far doing the best; honorable mention goes to Colorado, Washington, Illinois, North Dakota and Wyoming.
  - o When availability of psychiatrists is also considered in clozapine use, Oregon was doing the worst. Dishonorable mention goes to North Carolina, Delaware, New York and California.
- The use of clozapine can be regarded as a measure of the effort being made by a state to treat individuals with schizophrenia who are most in need of treatment. The range of effort in the United States varies widely from South Dakota (best) to Oregon (worst).