

Schizophrenia

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What is Schizophrenia?

Schizophrenia is defined as a mental disorder in which reality is abnormally interpreted as a result of a hallucination, delusions, and/or disordered thinking and behavior that can be disabling as it impairs daily functioning (Mayo Clinic, 2020).

The causes of Schizophrenia are not well known/understood as they are very complex, but there are several risk factors that are believed to influence the development of the disease (National Institute of Mental Health, 2020).

Prevalence

There are more than 200,000 US cases per year

Worldwide: 1% of the population is diagnosed with Schizophrenia

Americans: Approx. 1.2% (3.2 million) have the disorder (Statistics for schizophrenia (2020)).

Female onset is 3 to 5 years later than males.

- ★ **Toddlers (3-5 years): Very Rare**
 - ★ **Children (6-13 years): Rare**
 - ★ **Teenagers (14 - 18 years): Common**
 - ★ **Young Adults (19-40 years): Common**
 - ★ **Adults (41-60 years): Common**
 - ★ **Seniors (60+ years): Common**
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Risk Factors For Schizophrenia

(MyMed, 2020)

- ★ History of schizophrenia in the family.
 - ★ Father is older during the conception of the baby (35 years or older).
 - ★ Pregnancy and birth complications such as brain development issues or exposure to harmful toxins or viruses
 - ★ Immune system activation increased through inflammation and diseases.
 - ★ Taking mind-altering drugs as a teenager or young adult.
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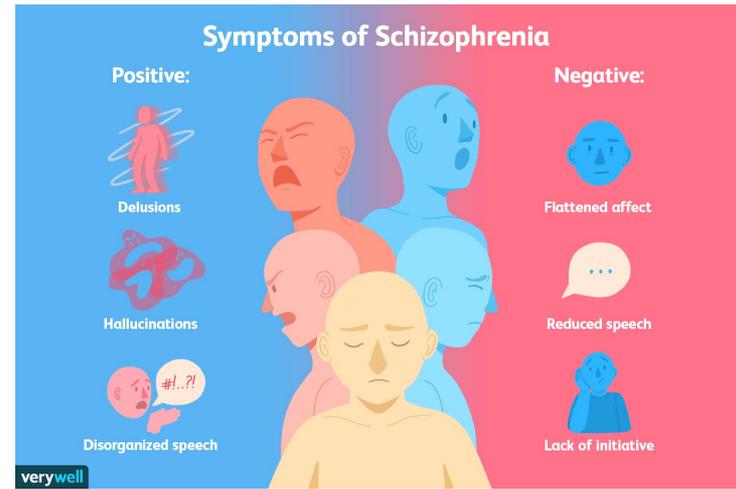
Signs & Symptoms

- Can be difficult to diagnose in teens, as first signs can present as common behaviors for that age range, such as change of friends, sleep problems, poor grades, isolating oneself, etc.
 - This period in younger adults can be called the “prodromal period.” (NAMI)
- Typical onset occurs during early adulthood, with an array of symptoms, that can become more prominent over time (Pollak, 2017).
- For diagnosis of schizophrenia, symptoms must be present and interfering with normal functioning for a time period of 6 months.



S/S continued...

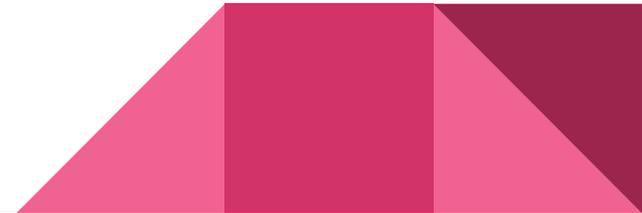
- Common symptoms include:
 - Hallucinations: hearing voices, seeing things not present, smelling things other cannot perceive
 - Delusions: false beliefs that do not change even if the individual is presented with new information
 - Negative symptoms: emotionally flat, speaking in a disconnected manner, little interest in things, unable to sustain relationships
 - Cognitive issues/ disorganized thinking: struggle to remember things, complete tasks, stay focused



DSM-5 Diagnostic Criteria

According to the American Psychiatric Association's DSM-5, in order to diagnose Schizophrenia the following must be met (Videbeck, 2020):

- A. 2 or more of the following must be present for the majority of 1 month or less if treated (Videbeck, 2020):
 - a. Delusions
 - b. Hallucinations
 - c. Disorganized speech
 - d. Grossly disorganized or catatonic behavior
 - e. Negative symptoms



DSM-5 Diagnostic Criteria Cont.

B. Level of function in work, interpersonal relations, and self-care is below the level achieved prior to onset or the failure to achieve those expected levels exist for a significant period of time (Videbeck 2020).

C. Continuous signs of the disturbance that last for at least 6 months, with symptoms that meet Criteria A for at least 1 month (Videbeck, 2020).

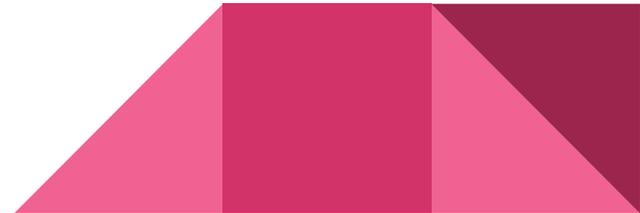
D. Other mental health disorders such as schizoaffective disorder and depressive or bipolar disorder have been ruled out because no episodes occur with Criteria A symptoms (Videbeck, 2020).



DSM-5 Diagnostic Criteria Cont.

E. Disturbances not contributed due to effects of a substance or another medical condition (Videbeck, 2020).

F. If a child who has a history of autism spectrum disorder or communication disorder, diagnosis of schizophrenia can only be made if prominent delusions or hallucinations occur in conjunction with other required symptoms for at least 1 month (Videbeck, 2020).



Interventions

- Diagnostic Test (Rules out any physical illness causing the symptoms) (Mayo Clinic, 2020)
 - MRI
 - CT scan
 - Blood Test
- Standardized Screening Tools
 - Abnormal Involuntary Movement Scale (AIMS)
 - Used to monitor involuntary movements and tardive dyskinesia in clients who are on antipsychotic medications
 - World Health Organization Disability Assessment Schedule (WHODAS)
 - Determines a patient's level of global functioning
- Medications
 - First- generation Antipsychotics (Used to treat positive psychotic signs and symptoms)
 - Haloperidol
 - Loxapine
 - Chlorpromazine
 - Fluphenazine

Interventions Continued

- Second-generation Antipsychotics (Treat both positive and negative symptoms)
 - Risperidone (Current medication of choice)
 - Olanzapine
 - Quetiapine
 - Ziprasidone
 - Clozapine
- Third-generation Antipsychotics (Treat both positive and negative symptoms with improving cognitive function)
 - Aripiprazole
- Therapy
 - Milieu
 - Is used to provide a safe environment for schizophrenia patients. This helps patients control constant thinking of hallucinations
 - Individual
 - Help normalize thought patterns
 - Family
 - Therapy for families who need support or education on dealing with schizophrenia
 - Vocational rehabilitation and supported employment (Mayo Clinic, 2020)
 - Helps patients with schizophrenia find jobs

Theory/Theorist & Interventions

- The cause of schizophrenia is not yet known. It is likely, however, that a combination of physical, genetic, psychological, and environmental factors can increase the likelihood of developing this disease.
- Research by twelve theorists suggests that schizophrenia may be caused by a change in dopamine and serotonin levels in the brain (Brisch, Ralf, et al., 2018).
- Other studies by researchers Daniel Hanson and Irving Gottesman have concluded that a change in the body's sensitivity to neurotransmitters could cause this illness (Hanson and Gottesman, 2020).
- The primary intervention for someone who has been diagnosed with schizophrenia is to take a prescribed antipsychotic. Antipsychotic are theorized to treat this illness by affecting the brain neurotransmitter dopamine (White, 2020).

References

Brisch, Ralf, et al. "The Role of Dopamine in Schizophrenia from a Neurobiological and Evolutionary Perspective: Old Fashioned, but Still in Vogue." *Frontiers in Psychiatry*, Frontiers Media S.A., 19 May 2018, www.ncbi.nlm.nih.gov/pmc/articles/PMC4032934/#:~:text=Abstract,brain%20regions%20exist%20in%20schizophrenia.

Hanson, Daniel R, and Irving I Gottesman. "Theories of Schizophrenia: a Genetic-Inflammatory-Vascular Synthesis." *BMC Medical Genetics*, BioMed Central, 11 Feb. 2020, www.ncbi.nlm.nih.gov/pmc/articles/PMC554096/.

Mayo Clinic. (2020, January 7). *Schizophrenia*. Retrieved February 14, 2021, from <https://www.mayoclinic.org/diseases-conditions/schizophrenia/symptoms-causes/svc-20354443>

MyMed (2020). *What are the causes, risk factors and complications of schizophrenia?* MyMed.com
<https://www.mymed.com/diseases-conditions/schizophrenia/what-are-the-causes-risk-factors-and-complications-of-schizophrenia>

National Institute of Mental Health. (2020, May). *Schizophrenia*. Retrieved February 14, 2021, from <https://www.nimh.nih.gov/health/topics/schizophrenia/index.shtml>

Pollak, A. N., Edgerly, D., McKenna, K., & Vitberg, D. A. (2017). *Emergency care and transportation of the sick and injured*. Burlington, MA: Jones & Bartlett Learning.

Statistics for schizophrenia (2020). *How common is it and who it affects*. FHE Health – Addiction & Mental Health Care.
<https://fherehab.com/schizophrenia/statistics>

Schizophrenia. (n.d.). Retrieved February 15, 2021, <https://www.nami.org/About-Mental-Illness/Mental-Health-Conditions/Schizophrenia>

Videbeck, S.L. (2020). *Psychiatric-Mental Health Nursing* (8th ed.). Wolters Kluwer.

White, Adam. "Schizophrenia." *Mayo Clinic*, Mayo Foundation for Medical Education and Research, 7 Jan. 2020, www.mayoclinic.org/diseases-conditions/schizophrenia/diagnosis-treatment/drc-20354449.

