



# **SCHIZOPHRENIA**

**Symptomology & Treatment**

BY: MADISON WALL

# WHAT IS SCHIZOPHRENIA?

Schizophrenia is a complex psychiatric disorder that presents with chronic or recurrent episodes of psychosis and a broad range of other symptoms. Although the exact pathophysiology is not fully understood, it likely involves a combination of genetic predisposition, neurochemical imbalances and environmental influences.



# SYMPTOMOLOGY

## POSITIVE SYMPTOMS

- Psychosis
  - Hallucinations
  - Delusions
  - Disorganized thought
  - Disorganized speech
- Disorganized or catatonic behavior

## NEGATIVE SYMPTOMS

- Flat or blunted affect
- Poverty of speech
- Lack of motivation
- Inability to feel pleasure from activities previously enjoyed
- Emotional and/or social withdraw

# SYMPTOMOLOGY

## COGNITIVE SYMPTOMS

- Inattention
- Impaired memory
- Poor reasoning/ executive function

## OTHER SYMPTOMS

- Depression
- Anxiety
- Social phobia
- Specific phobia
- Sleep disturbances
- Neurological abnormalities
  - Sensory disturbances
  - Impaired coordination
- Impaired social and/or vocational function

# DSM- 5 DIAGNOSTIC CRITERIA

- DSM-5 diagnostic criteria:
  - 2 or more of the following symptoms, with at least one from the first three symptoms listed:
    - Delusions
    - Hallucinations
    - Disorganized Speech
    - Disorganized behavior or catatonia
    - Negative symptoms
  - Symptoms must persist for 1 month or more
  - Continuous signs of disturbance for 6 months or more
  - Symptoms must cause social, occupational or personal functional impairment for 6 months or more
  - Schizoaffective and mood disorder with psychotic features ruled out
  - Medical or substance use disorder ruled out

# FDA- APPROVED TREATMENTS

- Medication:

- Antipsychotics:

- 1<sup>st</sup> generation (typical) antipsychotic
      - D2 receptor antagonists
      - Better for treating positive symptoms of schizophrenia
      - More side effects
        - higher risk of EPS, TD, sedation and anticholinergic effects
    - 2<sup>nd</sup> generation (atypical) antipsychotics
      - Most are 5-HT<sub>2</sub> and D<sub>2</sub> antagonist with varying  $\alpha$  and H<sub>1</sub> effects
      - Can treat both positive and negative symptoms
      - Fewer side effects
        - Higher risk of metabolic syndrome, hormonal effects, sedation, QT prolongation with ziprasidone, agranulocytosis with clozapine
    - Xanomeline-Tropium Chloride (Cobenfy)
      - fixed combination of xanomeline (a muscarinic agonist) and tropium (a muscarinic antagonist).
      - FDA approval for schizophrenia in 2024

- Therapy

- CBT, family therapy, cognitive remediation and social skills training



# FDA- APPROVED TREATMENTS

## TYPICAL ANTIPSYCHOTICS

- Chlorpromazine
  - Adults and children (1-12yo), low potency
- Fluphenazine
  - Adults and children (12yo or older), high potency
- Haloperidol
  - Adults, high potency
- Loxapine
  - Adults and children (12yo or older)
- Perphenazine
  - Adults and children (12yo or older), high potency
- Prochlorperazine
  - Adults and children (older than 2yo and greater than 20lbs)
- Thiothixene
  - Adults and children (12yo or older)
- Thioridazine
  - Adults and children, low potency
- Trifluoperazine
  - Adults and children (6yo or older), high potency

## ATYPICAL ANTIPSYCHOTICS

- Aripiprazole
  - Adults and adolescents (13-17yo), LAI
- Asenapine
  - Adults, Acute schizophrenia
- Brexpiprazole
  - Adults and adolescents (13yo or older)
- Clozapine
  - Adults, Treatment resistant schizophrenia or reduce suicidal behavior in younger pts with schizophrenia
- Iloperidone
  - Adults, Acute schizophrenia
- Olanzapine
  - Adults and adolescents (13-17yo), agitation associated with schizophrenia, LAI, high risk of weight gain and DM
- Paliperidone
  - Adults, LAI
- Quetiapine
  - Adults and adolescents (13-17yo)
- Risperidone
  - Adults and adolescents (13-17yo), LAI
- Ziprasidone
  - Adults, Acute agitation in pts with schizophrenia, lower metabolic risk

# WORKS CITED

- American Psychiatric Association. The American Psychiatric Association Practice Guideline for the Treatment of Patients With Schizophrenia. 2020. doi: [10.1176/appi.books.9780890424841](https://doi.org/10.1176/appi.books.9780890424841)
- Christian R, Saavedra L, Gaynes BN, et al. Future Research Needs for First- and Second-Generation Antipsychotics for Children and Young Adults [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Feb. (Future Research Needs Papers, No. 13.) Appendix A, Tables of FDA-Approved Indications for First- and Second-Generation Antipsychotics. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK84656/>
- Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR). url: <http://dx.doi.org/10.1176/appi.books.9780890425787>