

# Schizophrenia: Physiological Basis of a Mental Illness

## Symptom Manifestation

Schizophrenia is a severe mental disorder affecting an individual's ability to think, feel, and behave clearly. The symptoms are typically divided into three categories: positive, negative, and cognitive. Positive symptoms are those that most individuals do not normally experience but are present in people with schizophrenia, such as hallucinations, delusions, and disordered thoughts or behaviors. Negative symptoms are associated with disruptions to normal emotions and behaviors, such as reduced expression of emotions, reduced feelings of pleasure in everyday life, and difficulty beginning and sustaining activities. Cognitive symptoms pertain to problems with attention, memory, and executive functions, which are key for planning and organizing (National Institute of Mental Health, 2021).

## Diagnostic Criterion

According to the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (DSM-5), for a diagnosis of schizophrenia, symptoms must persist for six months. At least one month of that period must include two or more symptoms: delusions, hallucinations, disorganized speech, disorganized or catatonic behavior, or negative symptoms. Additionally, these symptoms must cause significant impairment in one or more major areas of functioning, such as work, interpersonal relations, or self-care (American Psychiatric Association, 2013).

## Possible Treatment Considerations

Treating schizophrenia often involves a combination of medication, psychological therapies, and social support. Antipsychotic medications are typically the first line of treatment and work by influencing the brain's neurotransmitter systems, particularly dopamine, and serotonin. These medications can help reduce the intensity and frequency of psychotic symptoms. However, they can have side effects such as movement problems, weight gain, and drowsiness (Miyamoto et al., 2012).

Psychological therapies, such as cognitive-behavioral therapy (CBT) for psychosis, can be effective in helping individuals cope with their symptoms and improve their quality of life. CBT can help individuals challenge the irrational thoughts that can come with schizophrenia and reduce the distress caused by their symptoms (Turkington et al., 2006).

Social support, including supported employment, housing services, and family education, can also be integral in helping individuals with schizophrenia to live independently and to reduce relapses. This underlines the importance of considering the whole person and their environment in treating schizophrenia (Rosenheck et al., 2006).

Schizophrenia is a complex mental illness with various symptoms affecting an individual's thoughts, emotions, and behaviors. Its physiological basis suggests the significant role of brain chemistry and structure in its onset and progression. Treatments are available that can manage symptoms and significantly improve the lives of those affected by schizophrenia, underlining the importance of timely diagnosis and comprehensive care.

## References

- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). American Psychiatric Publishing.
- Miyamoto, S., Miyake, N., Jarskog, L. F., Fleischhacker, W. W., & Lieberman, J. A. (2012). Pharmacological treatment of schizophrenia: a critical review of the pharmacology and clinical effects of current and future therapeutic agents. *Molecular psychiatry*, 17(12), 1206-1227.
- National Institute of Mental Health. (2021). Schizophrenia.
- Rosenheck, R., Leslie, D., Keefe, R., McEvoy, J., Swartz, M., Perkins, D., ... & Lieberman, J. (2006). Barriers to employment for people with schizophrenia. *American Journal of Psychiatry*, 163(3), 411-417.
- Turkington, D., Kingdon, D., & Chadwick, P. (2006). Cognitive-behavioral therapy for schizophrenia: A review. *Journal of psychiatric practice*, 12(1), 5-16.