**SCHIZOPHRENIA** 



Empowering Communities...

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#### **INTRODUCTION:**

Schizophrenia is a serious and chronic mental illness that affects how a person thinks, feels, and behaves. It is characterized by a range of symptoms, including hallucinations, delusions, disorganized thinking and speech, and social withdrawal.

#### **ETIOLOGY:**

- **Genetics:** Schizophrenia tends to run in families, suggesting a genetic component to the disorder. However, it is not caused by a single gene but rather a complex interplay of multiple genes.
- Environmental factors: Environmental factors, such as prenatal exposure to infections, stress, or trauma, may increase the risk of developing schizophrenia.
- **Brain chemistry:** There is evidence that abnormalities in the levels or functioning of certain neurotransmitters, such as dopamine and glutamate, may play a role in the development of schizophrenia.
- **Brain structure:** Differences in brain structure, such as enlarged ventricles or reduced gray matter, have been observed in some individuals with schizophrenia.
- **Substance abuse:** Substance abuse, particularly of cannabis or amphetamines, may increase the risk of developing schizophrenia, particularly in those with a genetic predisposition.

# **PATHOPHYSIOLOGY:**

- Due to different etiological factors, it occurs.
- Changes in brain chemistry and structure, particularly in the prefrontal cortex and limbic system, may play a role in the development of schizophrenia.
- These changes may impact the way the brain processes information, leading to the characteristic symptoms of the disorder, such as hallucinations, delusions, and disorganized thinking.
- Another factor is an overactivity of the neurotransmitter dopamine in certain areas of the brain. This may lead to the perception of false sensations, such as hearing voices or seeing things that are not actually present.

## **CLINICAL MANIFESTATION:**

- Hallucinations: Seeing or hearing things that are not actually there.
- **Delusions:** Believing in things that are not true, such as paranoia or grandiosity.
- **Disorganized speech:** Difficulty in organizing thoughts and expressing them coherently.
- **Disorganized behavior:** Lack of organization and goal-directed behavior.
- **Negative symptoms:** Lack of emotions or motivation, social withdrawal, and difficulty with basic self-care.
- **Cognitive symptoms:** Difficulty with attention, memory, and decision-making.

#### **DIGNOSIS:**

• **Clinical interviews:** The mental health professional will ask the individual about their symptoms, medical history, and family history of mental illness.

- **Diagnostic criteria:** The mental health professional will use the criteria outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) to assess the individual's symptoms and make a diagnosis.
- **Physical examination:** A physical examination may be done to rule out any medical conditions that could be causing the symptoms.
- Laboratory tests: Blood tests and other laboratory tests may be done to rule out other medical conditions that could be contributing to the symptoms.
- **Neuroimaging:** Imaging tests, such as MRI or CT scans, may be done to look for any structural abnormalities in the brain that could be related to the symptoms.

## PHARM ACOLOGICAL MANAGEMENT:

- Antipsychotics: Examples of antipsychotics include risperidone, olanzapine, quetiapine, aripiprazole, and clozapine.
- **Mood stabilizers:** Some mood stabilizers, such as lithium and valproic acid, may be used to treat schizophrenia, particularly in individuals who also have bipolar disorder.
- Antidepressants: Antidepressant medications includes fluoxetine (Prozac), sertraline (Zoloft), and escitalopram (Lexapro).
- **Benzodiazepines:** Benzodiazepines, such as lorazepam or clonazepam, may be used to treat anxiety or agitation that may occur in individuals with schizophrenia

#### NON- PHARMACOLOGICAL MANAGEMENT/PREVENTION:

- **Early intervention:** Identifying and treating symptoms of psychosis as early as possible may help prevent or minimize the development of schizophrenia. Early intervention programs that provide comprehensive and coordinated care may be beneficial.
- Managing stress: Stressful life events, such as trauma or loss, can trigger the onset of schizophrenia in some individuals. Learning stress-

management techniques and seeking support from family, friends, or mental health professionals can be helpful.

- Avoiding substance abuse: Substance abuse, particularly of marijuana and other hallucinogenic drugs, has been linked to an increased risk of developing schizophrenia. Avoiding substance abuse or seeking treatment for addiction can help reduce the risk.
- Eating a healthy diet: There is some evidence that suggests that a healthy diet, particularly one that includes foods rich in omega-3 fatty acids, may help reduce the risk of developing schizophrenia.
- **Getting enough sleep:** Sleep deprivation and disruptions in sleep patterns have been linked to an increased risk of developing schizophrenia. Getting enough sleep and establishing a regular sleep routine may be helpful.