

Member of a medical scheme? Know your guaranteed benefits!

# Focus on Schizophrenia

The World Health Organization (WHO) estimates that approximately 30.8% of all years lived with disability (YLDs) are due to neuropsychiatric disorders, primarily unipolar depression (11.9%), alcohol use disorder (3.1%), schizophrenia (4.8%), and bipolar mood disorder (4.4%).

Schizophrenia impacts approximately 24 million individuals globally, representing 1 in 300 people. Among adults, the prevalence is higher at 1 in 222 people.

### What is schizophrenia?

Schizophrenia is a type of chronic and severe mental disorder characterised by a profound withdrawal from reality. Individuals affected may experience hallucinations, which involve perceiving sensations that others do not, such as seeing, hearing, or feeling things that are not present. This disorder is marked by a gradual deterioration of personality, emotional instability, and various other psychotic behaviours.

# What are the types of schizophrenia?

There are five types of schizophrenia, each characterised by its own symptoms.

 Paranoid-type schizophrenia may believe in things that are not true (delusions) and hear voices that do not exist. Their thinking and emotions might seem relatively normal. The delusions can often be about being treated unfairly or being someone else who is famous. They are prone to showing signs of anger, anxiety, be distant, and argumentative.



- 2. Disorganised-type schizophrenia have difficulty with their speech and behaviour. The speech may be difficult to understand, and the emotions might either be very flat or expressed inappropriately. People with disorganised-type schizophrenia may laugh at the changing colour of a traffic light or at something not closely related to what they are saying or doing. Their disorganised behaviour may disrupt normal activities, such as showering, dressing, and preparing meals etc.
- Catatonic-type schizophrenia is characterised by disturbances of movement. People with catatonic-type schizophrenia may keep themselves completely immobile or move all over the place. They may not say anything for

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hours, or they may repeat everything you say or do senselessly. The behaviour puts these people at high risk because it impairs their ability to take care of themselves.

- Undifferentiated-type schizophrenia is characterised by some symptoms seen in all the above types but not enough to classify them into a specific category.
- 5. **Residual-type schizophrenia** is characterised by a history of at least one episode of schizophrenia, but the person currently has no positive symptoms (delusions, hallucinations, disorganised speech, or behaviour). It may represent a transition between a full-blown episode and complete remission, or it may continue for years without any further psychotic episodes.

## What causes schizophrenia?

The exact causes of schizophrenia are unknown. Research suggests a combination of physical, genetic, psychological, and environmental factors can make a person more likely to develop the condition. Some people may be prone to schizophrenia, and a stressful or emotional life event might trigger a psychotic episode.

 Genetics - Schizophrenia often runs in families, but no single gene is thought to be responsible. Differences in brain development - Studies have shown that people with schizophrenia may have subtle differences in the structure of their brains.

Neurotransmitters - These are chemicals that carry messages between brain cells. People with schizophrenia may have different amounts of certain neurotransmitters in their brains.

- Pregnancy and birth complications Research has shown people who develop schizophrenia are more likely to have experienced complications before and during their birth, such as:
  - a low birth weight
  - premature labour
  - a lack of oxygen (asphyxia) during birth
- *Triggers* Certain events can trigger the development of schizophrenia in people who are already at risk, such as:
  - bereavement
  - losing your job or home
  - divorce
  - the end of a relationship
  - physical, sexual, or emotional abuse
- *Drug abuse* studies have shown that the use of drugs particularly cannabis, cocaine, LSD (lysergic acid diethylamide) or amphetamines, can increase the risk of developing schizophrenia, psychosis or a similar illness.

#### What are the symptoms of schizophrenia?

Symptoms of schizophrenia fall into three categories: positive symptoms, negative symptoms and cognitive symptoms.

Positive symptoms refer to experiences that go beyond what most people consider normal reality. Positive symptoms are extremely overstated ideas, perceptions or actions that show the person cannot tell what is real and what is not real.

- Hallucinations see, hear, smell or feel things that are not present
- Delusions strange beliefs and sticking to those beliefs even when others try to show that they are not real or are against what is true
- Disorganised thoughts and speech - difficulty organising thoughts or connecting them logically
- Struggling to concentrate
- Agitated body movements
- Impaired social functioning like struggling with interpersonal relationships and daily activities

Negative symptoms involve a decrease or loss of certain abilities or functions that can affect:

- A person shows no emotion or inappropriate affect e.g. they may laugh at a funeral
- The flat affect, which is when a person's face does not move, or they talks in a dull or monotonous voice
- Lack of pleasure in everyday life
- Inability to begin and sustain planned activities
- Speaking little even when forced to interact

Cognitive symptoms reflect how well the person's brain learns, stores, and uses information. These symptoms make it hard to lead a normal life and can lead to emotional distress, and 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.

## How is schizophrenia diagnosed?

If symptoms are present, the doctor will perform a complete medical history and physical examination. Although there are no laboratory tests to diagnose schizophrenia, various diagnostic tests are done to rule out if a physical illness is the cause of the symptoms. These tests are:

- Electrocardiogram (ECG) a test that checks how the heart is doing.
- Electroencephalogram (EEG) a test that looks at the electrical activity in the brain.
- Computed tomography (CT) scans a powerful X-ray that takes detailed pictures of the inside of your body.
- Magnetic resonance imaging (MRI) scans a detailed picture-taking method that uses a strong magnetic field and radio waves.
- Blood tests

Doctors (General Practitioners and Psychiatrists) use specially designed interviews and assessment tools to evaluate a person for schizophrenia. The doctor compares the symptoms with criteria from a book called DSM-5 (Diagnostic and Statistical Manual of Mental Disorders), which is the standard reference book for recognised mental illnesses.

According to the DSM-5, a diagnosis of schizophrenia is made if a person has two or more core symptoms, persisting for at least one month. These core symptoms include hallucinations, delusions, or disorganised speech, with additional features of gross disorganisation and diminished emotional expression.

Other DSM-5 criteria for a diagnosis of schizophrenia include:

- The doctor checks for other things, like a significant decline in work, interpersonal relationships, or self-care compared to the period before the onset of symptoms.
- The signs of disturbance that have lasted at least six (6) months.
- The doctors make sure it is not another condition like schizoaffective disorder, depressive disorder, or bipolar disorder with psychotic symptoms. Confirmation that the disturbance is not caused by substance abuse or another medical condition.

#### Recommended blood tests include:

Doctors will perform a range of blood tests to investigate physical health and rule out other health problems that may be the cause of the disease.

A list of these tests is available on the <u>PMB Definition Guideline</u> for <u>Schizophrenia</u> on page 3 of the appendices. Table 2: Base-Line Investigations and Monitoring.

Other investigations for diagnostic workups recommended as PMB level of care:

- 24-hour EEG is recommended as PMB level of care when there is any clinical suspicion or to exclude temporary lobe epilepsy (TLE).
- A baseline ECG with QTc calculation is PMB level of care as

anti-psychotic therapy may prolong QT interval.

- While neuroimaging and cognitive testing may help to rule out alternatives such as schizophrenia-like manifestations of other disorders affecting brain function, schizophrenia is essentially a clinical diagnosis. Neuroimaging is recommended for the 1st episode, when the clinical picture is atypical when there are abnormal findings on routine examination and for all cases of late onset disease.
- A CT scan of the brain is PMB level of care whilst motivation would be required for a Brain MRI.

# **Treatment of schizophrenia**

People with symptoms of schizophrenia must be assessed and start treatment as soon as possible. It may be necessary to go to a hospital or a mental health clinic for an assessment and treatment. Hospitalisation may be only for a few days or a couple of weeks. Afterwards, treatment and care can continue at home. Ongoing treatment from the multi-disciplinary team is essential. Recommended healthcare providers for who can provide services to patients with schizophrenia:

- Primary treating physician, general practitioner
- Psychiatrist
- Clinical Psychologist
- Occupational therapist
- Social worker
- Physiotherapists
- Dietician
- Speech therapist
- Psychiatric nurse

Medication is essential and include anti-psychotic drugs, anti-depressants and mood stabilisers and is provided in accordance with the chronic disease algorithm in the PMB Regulations.

# What is PMB level of care for schizophrenia?

PMB regulations determine that the diagnosis, treatment and care of a disease must be funded in full by the medical schemes.

PMB regulations include Schizophrenia under the Diagnostic and Treatment Pair 907T - Schizophrenic and paranoid delusional disorders. The treatment for this DTP is specified as Hospital-based management up to 3 weeks per year.

In-hospital management may include electroconvulsive therapy, medicines (e.g. antipsychotics, antidepressant medication and mood stabilisers), and consultation with other health professionals such as social workers.

Schizophrenia is also included in the PMB Chronic Disease List (CDL).

The PMB chronic disease list algorithm for treatment includes antipsychotics, antidepressants and mood stabilisers such as lithium and sodium valproate (see the algorithm below). Antipsychotics may be taken orally or in the form of an <u>injection</u>. In addition to medication, medical schemes may issue a care plan for out-of-hospital management of schizophrenia which also includes consultations with a psychiatrist and/or general practitioner and other healthcare providers which your doctor may refer you to and will assist in managing the condition such as an occupational therapist.

Although schizophrenia is a PMB condition, it is important to remember that medical schemes can use designated service providers (DSPs). A DSP is a healthcare provider (such as a doctor, pharmacist, hospital) that is appointed by the medical scheme for the treatment or care of PMB conditions. Voluntarily opting for a non-DSP means you may have to pay a portion of the bill as a co-payment. Medical schemes may also have medicine formularies which should include medicines from all classes, and it is important to obtain the formulary information from the medical scheme and discuss this with the treating doctor. If a non-formulary drug is used, the medical scheme may charge a co-payment.

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