

# Schizophrenia Fact Sheet

## **Key Facts**

- Schizophrenia affects around 24 million people worldwide
- It usually starts in late adolescence or early adulthood and is a lifelong condition
- Symptoms include a lack of insight, hallucinations and delusions
- Treatment with antipsychotic medication and psychological therapy can reduce symptoms and improve functioning

## What is schizophrenia?

Schizophrenia is a severe mental disorder in which individuals experience episodes of 'psychosis' which involve symptoms such as hallucinations (hearing voices), delusions (false ideas), disordered thoughts and problems with feelings, behaviour and motivation. In many people symptoms recur or persist long-term, but some people have just one episode. It first affects people in the age range of 15-35 years. Most commonly it begins in late adolescence and the early twenties in men and later in women.

Schizophrenia is widely misunderstood with many people believing that those affected have a split or dual personality, which is not the case. The media have also exaggerated the likelihood of violent behaviour amongst schizophrenics; a person with schizophrenia is far more likely to be the victim of violent crime than the instigator.<sup>3</sup>

# The scale of the problem

Schizophrenia affects about 7 per 1000 of the adult population,<sup>2</sup> but because the disorder is chronic the overall incidence is high, at around 1% of the population.<sup>4</sup> This means that schizophrenia affects around **24 million people** worldwide. However, the symptoms are treatable, with medicines and psychological and social care, with costs being equivalent to around US\$2 per month per patient.<sup>2</sup>

The earlier treatment is initiated, the more effective it is, however the majority of people with schizophrenia do not receive treatment, which prolongs their illness. Most of those who are treated are cared for in the community with active family and community involvement.<sup>2</sup>

## How severe is schizophrenia?

Generally, with early treatment, around 80% of people will recover after their first episode of psychosis, although less than 20% will never have another episode. While many patients with schizophrenia have a lifelong vulnerability to recurrent episodes of illness, a large proportion will have few relapses and make a good functional recovery.

# Causes of schizophrenia

The causes of schizophrenia are not fully understood. Research suggests that schizophrenia may be caused by a change in the level of two of the chemicals that are used for communication in the brain (neurotransmitters), dopamine and serotonin, perhaps by an imbalance between the two or a change in the body's sensitivity to them. Genetic research suggests that while no one gene has been found for schizophrenia, several genes may cause a predisposition that can be triggered by certain life events such as:

- ▶ Premature birth and low birth weight
- ▲ Viral infections during development in the womb
- ▲ Restricted oxygen at birth<sup>5,6</sup>

#### And later in life:

- ▲ Social isolation (including migrant status)
- City dwelling
- ▲ Abnormal family interactions e.g. hostile or overly critical parents<sup>5,6</sup>

Short-lived illness can be associated with drug misuse, particularly with cocaine, amphetamines and cannabis. Cannabis use especially, has been observed to have an effect on established schizophrenia as well as increasing the risk of schizophrenia developing.<sup>5</sup>

## **Diagnosis**

There is currently no physical or laboratory test that can absolutely diagnose schizophrenia; a psychiatrist usually comes to the diagnosis based on clinical symptoms. Diagnosis is mainly based on the self-reported experiences of the person as well as abnormalities in behaviour reported by family members, friends or co-workers, followed by secondary signs observed by a psychiatrist, social worker, clinical psychologist or other clinician.<sup>7</sup>

#### Main features of the disease

Changes in thinking and behaviour are the most obvious symptoms of schizophrenia, although people experience schizophrenia in different ways. The symptoms are usually classified as either positive or negative.<sup>3</sup>

### **Positive symptoms**

Positive symptoms of schizophrenia represent a change in behaviour or thoughts:

▲ **Auditory hallucinations**, in which voices are heard, are the most common form of hallucinations. Voices may provide a running commentary on the person's actions,

- argue about the person, or echo the person's thoughts. Visual, smell, taste, or tactile hallucinations occur less commonly visual hallucinations occur in about 10% of people with schizophrenia.<sup>8</sup>
- ▲ **Delusions** may also be experience by individuals; delusions about external control of their thoughts, delusion that others can hear their thoughts, or that there is some form of external control of their emotions, sensations and actions.<sup>8</sup>
- ▲ **Thought disorder** is an impairment of the ability to form thoughts from logically connected ideas and is apparent in the person's speech. It makes their conversation hard to follow, and even incoherent.<sup>8</sup>

#### **Negative symptoms**

The negative symptoms of schizophrenia can often appear several years before somebody experiences their first acute psychotic episode, and is often referred to as the 'prodromal period'. Negative symptoms experienced by people living with schizophrenia include:

- ▲ Losing interest and motivation in life and activities, including relationships and sex
- ▲ Lack of concentration, not wanting to leave the house and changes in sleeping patterns
- ▲ Being less likely to initiate conversations and feeling uncomfortable with people, or feeling that there is nothing to say.<sup>3</sup>

# **Treatments and therapies**

The mainstay of psychiatric treatment for schizophrenia is antipsychotic medication, but psychotherapy is also widely recommended and used.

Antipsychotics work by blocking the effect of dopamine on the brain. Atypical antipsychotics are now generally used for first-line treatment for psychosis, such as amisulpiride, risperidone, quetiapine, olanzapine. These are preferred to older, typical antipsychotics because they cause fewer extrapyramidal reactions (Parkinsonian symptoms). However, they can still cause significant side-effects and patients need to be screened for endocrine disorders (e.g. diabetes) as well as neurological and cardiovascular problems.<sup>5</sup>

Once a patient has recovered from an acute episode of schizophrenia, they will usually remain on preventative doses of an antipsychotic for one to two years, being supervised by both primary and secondary health care professionals. After that time, if they are symptom free, the therapy will be withdrawn gradually with careful monitoring for relapse.<sup>5</sup>

▲ Psychological therapies can help reduce symptoms, improve functioning and prevent relapse, although their availability is often limited by a lack of trained therapists. In particular, Cognitive Behavioural Therapy (CBT) has been shown to reduce persistent symptoms and improve insight. Family therapy and other forms of

educational therapy can help to improve communication, raise awareness and reduce distress in both patients and their family members. Additionally, it can help reduce relapse rates, admission rates and improve compliance with treatment.<sup>5</sup>

## Impact on the lives of those affected and carers

Both the positive and negative symptoms of schizophrenia can impact the patient's relationships, social life, ability to work and general health.<sup>3</sup> Even for those patients who respond well to treatment, a diagnosis of schizophrenia continues to pose a risk:

- ▲ Mortality is 1.6 times higher than the general population
- ▲ Suicide risk is 9 times higher
- ▲ Death from violent incidents is twice as high
- ▲ 36% of patients have a substance misuse problem and there are high rates of cigarette smoking. <sup>6</sup>

In addition, 1 in 10 people with schizophrenia commit suicide and 4 in 10 attempts to end their lives.<sup>6</sup>

#### **Unmet needs**

There are still a number of major questions that remain to be answered about schizophrenia and its causes, prevention and treatment. In particular a better understanding of the site of any lesions within the brain that have an impact on brain function would be useful, as well as a greater knowledge of which other factors in the environment increase vulnerability to schizophrenia. Improved treatments would also be welcome, including the ability to tailor treatment to individual patients to improve outcomes and reduce side-effects.

As well as an improved understanding of the disease, a significant number of people with schizophrenia still aren't receiving timely, adequate treatment. The WHO estimate that more than 50% of persons with schizophrenia are not receiving appropriate care.<sup>2</sup>

#### **Further information**

- World Fellowship for Schizophrenia and Allied Disorders (WFSAD) / World Federation for Mental Health (WFMH) http://www.world-schizophrenia.org/
- European Federation of Associations of Families of People with Mental Illness www.eufami.org
- Rethink (formerly National Schizophrenia Fellowship) www.rethink.org
- Mind www.mind.org.uk

## References

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