SCHIZOPHRENIA: A REVIEW

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Summary

Schizophrenia is a mental disorder which is characterized by disintegration of the process of thinking and of emotional responsiveness, disturbances in language and thought and distortion of thought. The major contributory factors include genetics, neurobiology, early environment and sometimes recreational and prescription drugs. The symptoms of schizophrenia are not clearly defined or precisely demarcated. Most authentic theories and evidence suggest that schizophrenia is cause due to both genetic and environmental factors. The disease has been classified roughly into seven subtypes which are Paranoid type, Disorganized type, Catatonic type, Undifferentiated type, Residual type, Post-schizophrenic depression, and Simple Schizophrenia. Diagnosis is usually based on self-reported experience of person and clinical assessment of patient by a psychiatrist. The disease can be treated by two major methods pharmacotherapy and psychotherapy.

Keywords: Schizophrenia, Auditory hallucinations, Catatonic type, Drug abuse, Pharmacotherapy, Psychotherapy, Soteria model.

Introduction

Schizophrenia is a mental disorder which is characterized by disintegration of the process of thinking and of emotional responsiveness, disturbances in language and thought and distortion of thought (abnormalities in perception or expression of reality). It most commonly expresses itself as hallucinations (usually auditory hallucinations), disorganized speech and thinking, completely reversed temperament, paranoid delusions and social or emotional dysfunction.

The major contributory factors include genetics ^[1], neurobiology, early environment ^[2] and sometimes recreational ^[3] and prescription drugs. Neurobiology is considered most important now-a-days. High dopamine activity is usually found in the mesolimbic pathway of the brain of people suffering from schizophrenia. Although etymologically, the literal meaning of schizophrenia is "split personality" (from the Greek skhizein-to split, phren-mind), it is not related with the dissociative identity – a condition which is frequently confused with schizophrenia.

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EPIDEMIOLOGY

Schizophrenia occur equally in males and females ^[4], however the typical onset in men is earlier as compared to women. Onset during childhood is not very common. Incidence of schizophrenia is also associated with living in an urban environment ^[5].

SYMPTOMS

The symptoms of schizophrenia are not clearly defined or precisely demarcated. The most common symptoms include auditory hallucinations, delusions, emotional difficulty and disorganized thoughts and speech. Symptoms of paranoia, difficulty in cognition and social isolation are also associated with schizophrenia. Usually a person of aggressive nature becomes depressed and a person of mild temperament becomes aggressive due to schizophrenia.

The symptoms of schizophrenia are usually classified into positive, negative and cognitive ^[6]. Positive symptoms are those which are specifically related to patients of schizophrenia and are not present in normal people. They include hallucinations, auditory hallucinations and thought disorder (e.g. racing thoughts). Positive symptoms are also considered to be forms of psychosis. Negative symptoms are those which suggest lost of normal traits and abilities. They include lack of emotion, alogia (poverty of speech), anhedonia (inability to experience pleasure), asociality (lack of desire to form relationships) and avolition (lack of motivation). It is thought by researchers that negative symptoms have greater impact on the lives of the patient and people around him as compared to positive symptoms. Cognitive symptoms usually include disorganized thoughts, difficulty in following instructions and completing tasks and memory problems.

TYPES OF SCHIZOPHRENIA

The disease has been classified roughly into seven subtypes which are Paranoid type, disorganized type, Catatonic type, undifferentiated type, Residual type, Postschizophrenic depression, Simple Schizophrenia.

DIAGNOSIS

Diagnosis is usually based on self-reported experience of person and clinical assessment of patient by a psychiatrist. There is no physical or lab test currently present to diagnose schizophrenia, but many tests can be performed to rule out other similar disorders. This is the approach used to diagnose schizophrenia. Yet there has been some effort for standardization of diagnostic procedures for schizophrenia in recent years. Two most famous bodies setting these standardizations are American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders, (DSM-IV-TR) and World Health Organization's International Statistical Classification of Diseases and Related Health Problems, (ICD-10).

According to the former, three criteria must be met to diagnose schizophrenia which are Characteristic symptoms, Social dysfunction and Duration (at least 6 months).

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CAUSES OF SCHIZOPHRENIA

Most authentic theories and evidence suggest that schizophrenia is cause due to both genetic and environmental factors ^[7]. It is speculated that schizophrenia has a significant genetic part but the onset of disease is influenced by environmental factors ^[8]. The separation between the effects of heredity and effects of environment is, however, very difficult. The inherent vulnerability to schizophrenia is called diathesis. The diathesis which can be unmasked by biological or environmental factors or stressors is called stress-diathesis. Another theory suggesting that biological, psychological and social factors are all equally responsible is known as biopsychosocial model. Anyhow, the causes of schizophrenia can be roughly classified into four type's categories which are genetic (biological) factors, prenatal exposure to infections, social and environmental factors and drug abuse ^[9].

PREVENTION AND TREATMENT

There are no definite and remarkable indicators which warn that the disease might be coming, so there is not much to do to prevent this disease. The most widely used preventive measure is the public education campaign that educates the people about early symptoms of the disease [10].

The disease can be treated $^{[11]}$ by two major methods Pharmacotherapy and psychotherapy $^{[12]}$.

The most common medication given to schizophrenic persons is anti-psychotic drugs. They lessen the symptoms of psychosis. The newer atypical anti-psychotic drugs [13] are now preferred over older typical anti-psychotic drugs, because they have less side-effects, but they are more costly too.

Psychotherapy is also widely used and recommended to treat schizophrenia but not as much as pharmacotherapy, partly due to lack of training. The forms of psychotherapy, usually applied to the patients of schizophrenia are Cognitive Behavioral Therapy (CBT), Cognitive Enhancement Therapy [14], Family Therapy or Education and the Soteria Model [15].

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