## Schizophrenia

Dr. Faris Alsaraireh

 The term schizophrenia was coined in 1908 by the Swiss psychiatrist Eugen Bleuler.

 The word was derived from the Greek "skhizo" (split) and "phren" (mind).

- Over the years, much debate has surrounded the concept of schizophrenia.
- Various definitions of the disorder have evolved, and numerous treatment strategies have been proposed, but none have proven to be uniformly effective or sufficient.

 Two general factors appear to be gaining acceptance among clinicians.

 The first is that schizophrenia is probably not a homogeneous disease entity with a single cause but results from a variable combination of genetic predisposition, biochemical dysfunction, physiological factors, and psychosocial stress.

- The second factor is that there is not now and probably never will be a single treatment that cures the disorder.
- Instead, effective treatment requires a comprehensive, multidisciplinary effort, including pharmacotherapy and various forms of psychosocial care, such as living skills and social skills training, rehabilitation, and family therapy.

 Perhaps no psychological disorder is more crippling than schizophrenia.

 Characteristically, disturbances in thought processes, perception, and affect invariably result in a severe deterioration of social and occupational functioning.

- In the United States, the lifetime prevalence of schizophrenia is about 1 percent (Sadock & Sadock, 2003).
- Symptoms generally appear in late adolescence or early adulthood, although they may occur in middle or late adult life (American Psychiatric Association [APA], 2000).
- Some studies have indicated that symptoms occur earlier in men than in women.

- The premorbid personality often indicates social maladjustment or schizoid or other personality disturbances (Ho, Black, & Andreasen, 2003).
- This premorbid behavior is often a predictor in the pattern of development of schizophrenia, which can be viewed in four phases.



#### Psychosis

A severe mental condition in which there is disorganization of the personality, deterioration in social functioning, and loss of contact with, or distortion of, reality. There may be evidence of hallucinations and delusional thinking. Psychosis can occur with or without the presence of organic impairment.

- Phase I: The Schizoid Personality.
- The DSM-IV-TR (APA, 2000) describes individuals in this phase as
  - indifferent to social relationships
  - having a very limited range of emotional experience and expression.
  - They do not enjoy close relationships and prefer to be "loners."
  - They appear cold and aloof.
- Not all individuals who demonstrate the characteristics of schizoid personality will progress to schizophrenia. However, many individuals with schizophrenia show evidence of having had these characteristics in the premorbid condition.

- Phase II: The Prodromal Phase.
- Characteristics of this phase include
  - social withdrawal.
  - impairment in role functioning;
  - behavior that is peculiar or eccentric;
  - neglect of personal hygiene and grooming;
  - blunted or inappropriate affect;
  - disturbances in communication;
  - bizarre ideas;
  - unusual perceptual experiences;
  - lack of initiative, interests, or energy.
- The length of this phase is highly variable, and may last for many years before deteriorating to the schizophrenic state.

- Phase III: Schizophrenia.
- In the active phase of the disorder, psychotic symptoms are prominent. Following

- Phase III: Schizophrenia.
- The DSM-IV-TR (APA, 2000) diagnostic criteria for schizophrenia:
- Characteristic Symptoms: Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated):
  - Delusions
  - Hallucinations
  - Disorganized speech
  - Grossly disorganized or catatonic behavior
  - Negative symptoms (i.e., affective flattening, alogia, or avolition).

- Phase III: Schizophrenia.
- The DSM-IV-TR (APA, 2000) diagnostic criteria for schizophrenia:
- •Social/Occupational Dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relationships, or self-care are markedly below the level achieved before the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement).

- Phase III: Schizophrenia.
- The DSM-IV-TR (APA, 2000) diagnostic criteria for schizophrenia:
- •Duration: Continuous signs of the disturbance persist for at least 6 months.
- This 6-month period must include at least 1 month of symptoms (or less if successfully treated) that meet criterion 1 (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms.
- During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two or more symptoms listed in criterion 1 present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

- Phase IV: Residual Phase. Schizophrenia is characterized
  - by periods of remission and exacerbation.
  - A residual phase usually follows an active phase of the illness.
  - Symptoms during the residual phase are similar to those of the prodromal phase, with flat affect and impairment in role functioning being prominent.
  - Residual impairment often increases between episodes of active psychosis.

## **Prognosis**

- A return to full premorbid functioning is not common (APA, 2000).
- several factors have been associated with a more positive prognosis.
- These include good premorbid adjustment, later age at onset, female gender, abrupt onset of symptoms precipitated by a stressful event (as opposed to gradual insidious onset of symptoms), associated mood disturbance, brief duration of active-phase symptoms, good interepisode functioning, minimal residual symptoms, absence of structural brain abnormalities, normal neurological functioning, a family history of mood disorder, and no family history of schizophrenia (APA, 2000).

The cause of schizophrenia is still uncertain.
Most likely no single factor can be implicated in
the etiology; rather, the disease probably results
from a combination of influences including
biological, psychological, and environmental
factors.

#### - Genetics

\* Studies show that relatives of individuals with schizophrenia have a much higher probability of developing the disease than does the general population.

#### -Twin Studies

 - \*The rate of schizophrenia among monozygotic (identical) twins is four times that of dizygotic (fraternal) twins and approximately 50 times that of the general population (Sadock & Sadock, 2003).

#### Adoption Studies

 - \* the children who were born of schizophrenic mothers were more likely to develop the illness than the comparison control groups (Ho, Black, & Andreasen, 2003).

#### The Dopamine Hypothesis

- This theory suggests that schizophrenia (or schizophrenia- like symptoms) may be caused by an excess of dopamine-dependent neuronal activity in the brain.
- This excess activity may be related to increased production or release of dopamine at nerve terminals, increased receptor sensitivity, too many dopamine receptors, or a combination of these mechanisms (Sadock & Sadock, 2003).

#### Physiological Influences

\* A number of physical factors of possible etiological significance have been identified in the medical literature. However, their specific mechanisms in the implication of schizophrenia are unclear

#### Viral Infection

\* Sadock and Sadock (2003) report that epidemiological data indicate a high incidence of schizophrenia after prenatal exposure to influenza.

#### Anatomical Abnormalities

\* Ventricular enlargement is the most consistent finding; however, sulci enlargement and cerebellar atrophy are also reported.

#### Histological Changes

\* A "disordering" or disarray of the pyramidal cells in the area of the hippocampus has been suggested (Jonsson et al, 1997).

#### Physical Conditions

\* Some studies have reported a link between schizophrenia and epilepsy (particularly temporal lobe), Huntington's disease, birth trauma, head injury in adulthood, alcohol abuse, cerebral tumor (particularly in the limbic system), cerebrovascular accidents, systemic lupus erythematosus, myxedema, parkinsonism, and Wilson's disease.

#### Psychological Influences

\* These early theories related to poor parent child relationships and dysfunctional family systems as the cause of schizophrenia.

#### **Environmental Influences**

- Sociocultural Factors
- \* Many studies have been conducted that have attempted to link schizophrenia to social class. Indeed epidemiological statistics have shown that greater numbers of individuals from the lower socioeconomic classes experience symptoms associated with schizophrenia than do those from the higher socioeconomic groups (Ho, Black, & Andreasen, 2003).

#### Stressful Life Events

\* Studies have been conducted in an effort to determine whether psychotic episodes may be precipitated by stressful life events. There is no scientific evidence to indicate that stress causes schizophrenia.

- Disorganized Schizophrenia
- Onset of symptoms is usually before age 25.
- The course is commonly chronic.
- Behavior is markedly regressive and primitive.
- Contact with reality is extremely poor.
- Affect is flat or grossly inappropriate, often with periods of silliness and incongruous giggling.
- Facial grimaces and bizarre mannerisms are common,
- Communication is consistently incoherent.
- Personal appearance is generally neglected, and social impairment is extreme.

- Catatonic Schizophrenia
- Catatonic schizophrenia is characterized by marked abnormalities in motor behavior and may be manifested in the form of stupor or excitement.

#### Paranoid Schizophrenia

- Paranoid schizophrenia is characterized mainly by the presence of delusions of persecution or grandeur and auditory hallucinations related to a single theme.
- The individual is often tense, suspicious, and guarded, and may be argumentative, hostile, and aggressive.
- Onset of symptoms is usually later (perhaps in the late 20s or 30s), and less regression of mental faculties, emotional response, and behavior is seen than in the other subtypes of schizophrenia.
- Social impairment may be minimal, and there is some evidence that prognosis, particularly with regard to occupational functioning and capacity for independent living, is promising

#### Undifferentiated Schizophrenia

- Sometimes clients with schizophrenic symptoms do not meet the criteria for any of the subtypes, or they may meet the criteria for more than one subtype.
- These individuals may be given the diagnosis of undifferentiated schizophrenia.

- Residual Schizophrenia
- This diagnostic category is used when the individual has a history of at least one previous episode of schizophrenia with prominent psychotic symptoms.
- Residual schizophrenia occurs in an individual who has a chronic form of the disease and is the stage that follows an acute episode (prominent delusions, hallucinations, incoherence, bizarre behavior, and violence).

- Schizoaffective Disorder
- This disorder is manifested by schizophrenic behaviors, with a strong element of symptomatology associated with the mood disorders (depression or mania).
- The client may appear depressed, with psychomotor retardation and suicidal ideation, or symptoms may include euphoria, grandiosity, and hyperactivity.

# TREATMENT MODALITIES FOR SCHIZOPHRENIA

- Psychological Treatments
  - Individual Psychotherapy
  - Behavior Therapy
  - Group Therapy
  - Social Skills Training

# TREATMENT MODALITIES FOR SCHIZOPHRENIA

- Social Treatment
  - Milieu Therapy
  - Family Therapy
  - Assertive Community Treatment (ACT)

# TREATMENT MODALITIES FOR SCHIZOPHRENIA

- Organic Treatment
  - Psychopharmacology

## The end