SCHIZHOPHRENIA

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HISTORY

Emil Kraepelin, an Eminent Psychiatrist in 1896 formed the concept of **"Dementia praecox" – Mental Deterioration**

In 1911 **Eugen Bleuler** coined the term **"Schizophrenia"**

Skhizo - Split ,

Phren - Mind

Kurt Schneider described 11 symptoms, Collectively Called as **"First Rank Symptoms" (FRS)** whose presence / absence of course of brain disease was diagnostic of schizophrenia.

DEFINITION

The schizophrenic disorders are characterized in general by fundamental & characteristic distortions of thinking & Perception, and by inappropriate or blunted affect. The most intimate thoughts, feelings & acts are often felt to be known or shared by others, & Explanatory delusions may develop, to the effect that natural or supernatural forces are at work to influence the afflicted individual's thoughts & actions in ways that are often Bizarre.

Schizophrenia is a psychotic condition characterized by a disturbance in thinking, Emotions, Volitions & Faculties in the Presence of clear consciousness, which usually leads to social withdrawal.

Schizophrenic

CLASSIFICATIONS

DSM – IV CLASSIFICATION

According to DSM – IV,

At least 2 or more of characteristics symptoms must be present for a particular portion / part of time during a 1 month period.

- Delusions
- Hallucinations
- Disorganized speech
- Grossly disorganized / Catatonia behavior
- Negative symptoms such as Flat Affect, Alogia / Avolition

ICD – 10 CLASSIFICATION

F 20 – 29	Schizophrenia, Schizotypal & Delusional Disorders
F20	Schizophrenia
F20.0	Paranoid Schizophrenia
F20.1	Hebephrenic Schizophrenia
F20.2	Catatonic Schizophrenia
F20.3	Undifferentiated
F20.4	Post – Schizophrenic Depression
F20.5	Residual Schizophrenia
F20.6	Simple Schizophrenia
F21	Schizotypal Disorder

EPIDEMIOLOGY

It is the most common of all Psychiatric disorders & is prevalent in all cultures across the world.

15% of new admissions in mental Hospitals are schizophrenic patients.

Schizophrenic patients occupy 50% of all mental hospital Beds.

About 3 – 4 / 1000 in every community suffer from schizophrenia.

- About 1% of the general population have the risk of developing this disease in their life time
- Men = Women
- About 2/3 of cases are in the age group of 15 – 30 years

MEN	WOMEN
Peak ages of onset are 15 – 25 years	Peak ages of onset are 25 – 35 years

- Very common in lower Socio – economic groups

ETIOLOGY

BIOLOGICAL THEORIES

Biochemical theories

Dopamine Hypotheses

An excess of Dopamine – Dependent neuronal activity in the brain may cause schizophrenia

Other Biochemical Hypotheses

Abnormalities in the Neuro - transmitters

(Nor epinephrine, Serotonin, Acetylcholine & Gamma – amino butyric acid [GABA])

Abnormalities in the Neuro - regulators

(Prostaglandins & Endorphins)

Neuro structural theories

Pre frontal Cortex & Limbic Cortex may never fully develop in the brains of persons with schizophrenia

CT & MRI studies of brain structure shows

- **Decreased brain volume**
- **Larger lateral & 3rd Ventricles**
- **Atrophy in the Frontal lobe, cerebellum & limbic Structures**
- **Increased size of Sulci on the Surface of brain**

Genetic theories

- More common among people born of Consanguineous marriages
- Identical twins affected 50%
- Fragmental twins affected 15%
- Brother / Sister affected 10%
- One Parent affected 15%
- Both Parents affected 35%
- 2nd Degree Relatives affective 2 - 3%
- General Population 1%

Perinatal Risk Factors

- Maternal Influenza
- Birth during Late winter / Early spring
- Complications of Pregnancy particularly during Labor & Delivery

PSYCHODYNAMIC THEORIES

Developmental theories

According to Freud,

In Psychosexual Development

Oral Stage – Regression present along with that Denial, Projection & Reaction Formation

The Individual have poor ego boundaries, Fragile ego, Inadequate ego development, Super ego Dominance, Regressed id ego, Love – Hate relationships & Arrested Psychosexual Development

Family Theories

Mother – Child Relationship:

The mothers of schizophrenics as cold, Over – protective & Domineering, thus retarding the ego development of the child.

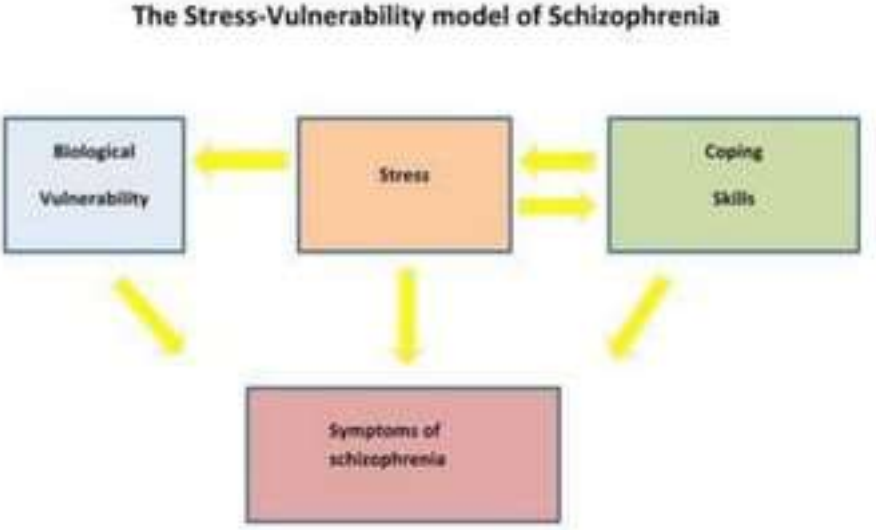
Dysfunctional Family System:

Hostility between parents can lead to a Schizophrenic Daughter

Double – Blind Communication:

Parents Convey 2 or more conflicting & incompatible messages at the same time

Stress Vulnerability Model

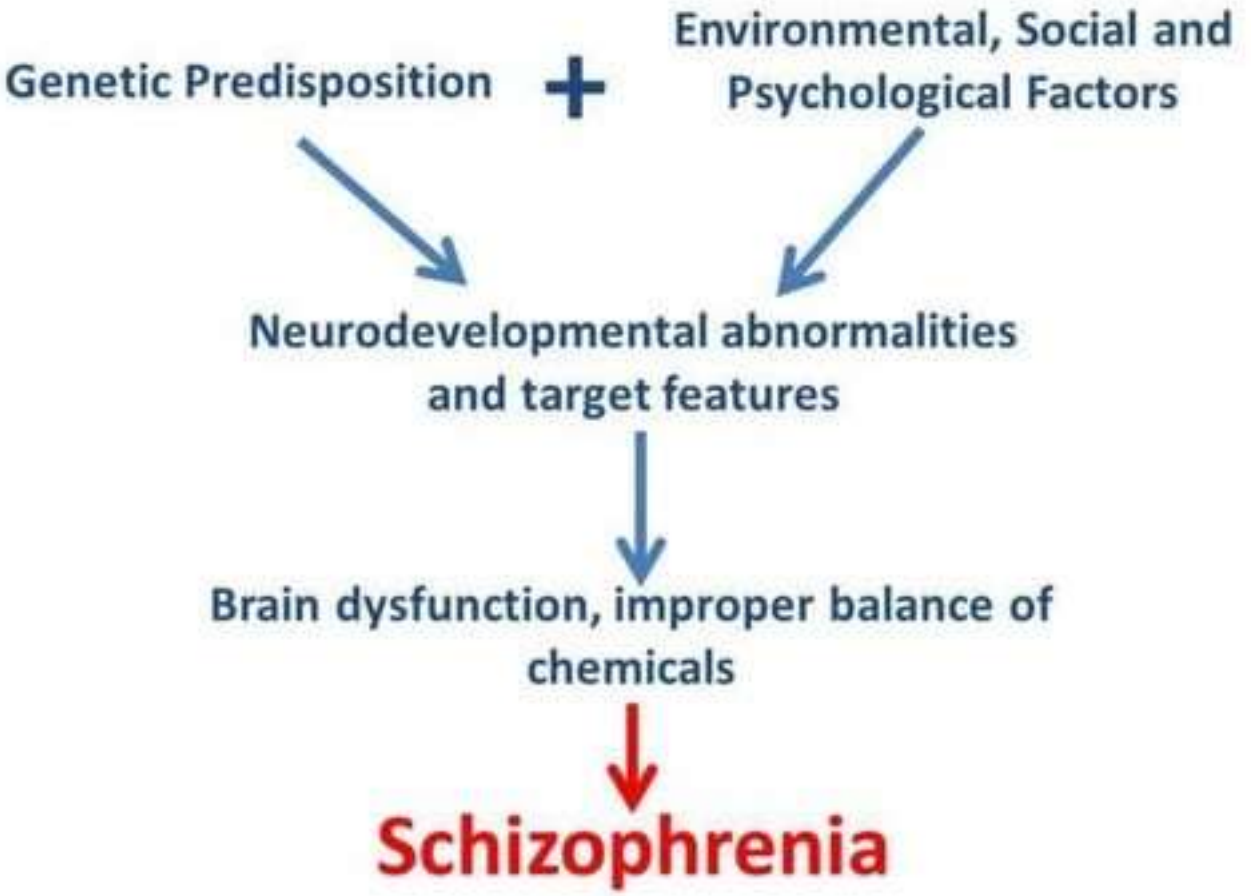


Social Factors

More Prevalent in areas of high social morbidity & Disorganization, especially among members of very low socio economic classes.

Stressful life events also can precipitate the disease in Predisposed Individuals

PSYCHOPATHOLOGY



Schizophrenia has multiple psychopathological dimensions

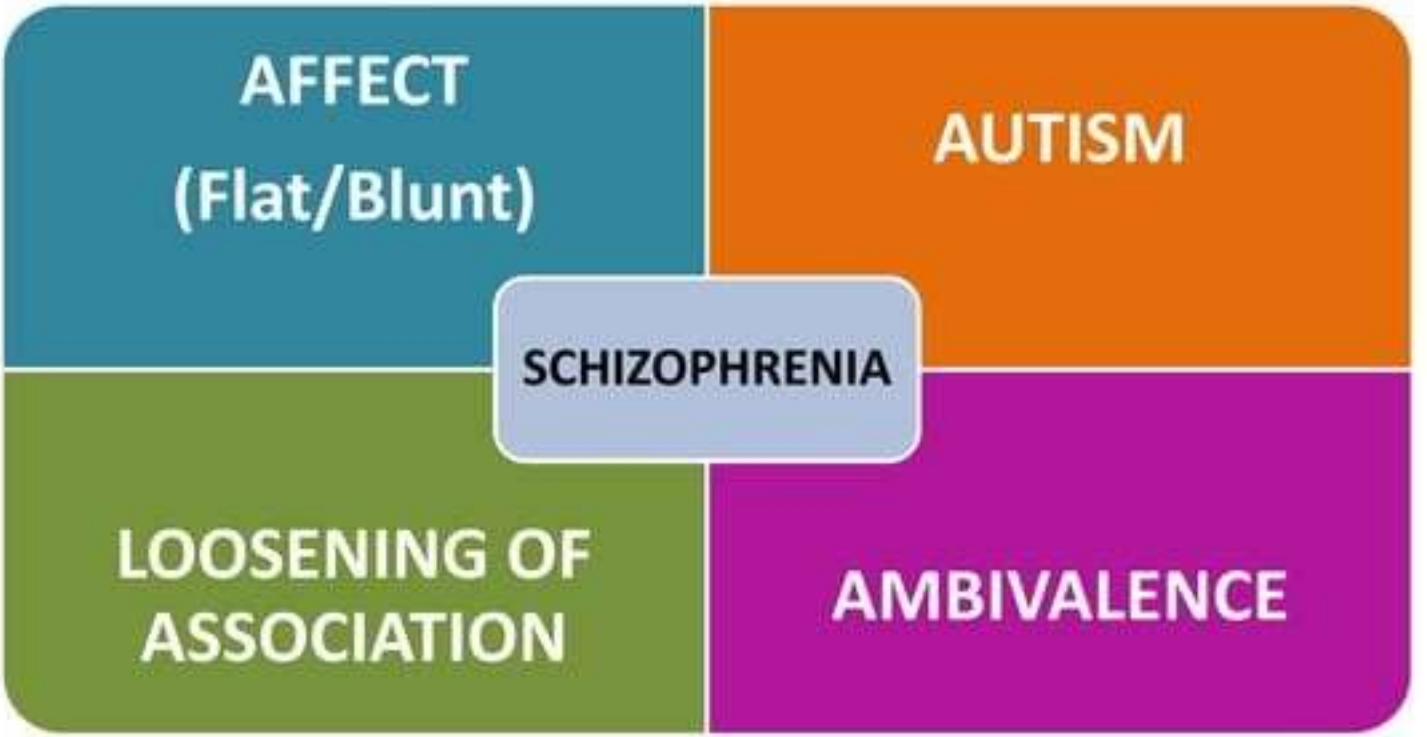
Positive symptoms	Negative symptoms	Cognitive deficits	Mood symptoms	Other
• Dellusions • Hallucinations • Thought disorder	• Apathy • Social withdrawal • Restricted affect • Anhedonia	• Attention • Memory • Executive function	• Dysphoria • Depression	• Agitation/ excitement

PHASES OF SCHIZOPHRENIA

Prodromal	Psychotic (acute phase)	Residual (chronic phase)
• Decline in functioning that precedes 1st psychotic episode • Socially withdrawn, irritable • Physical complaints • Newfound interest in religion / the occult	• Positive symptoms • Perceptual disturbances (e.g. auditory hallucinations) • Delusions (usually secondary, delusion of reference common) • Disordered thought process / content	• Occurs between episodes of psychosis • Marked by negative symptoms (flat affect, social withdrawal) • odd thinking and behavior

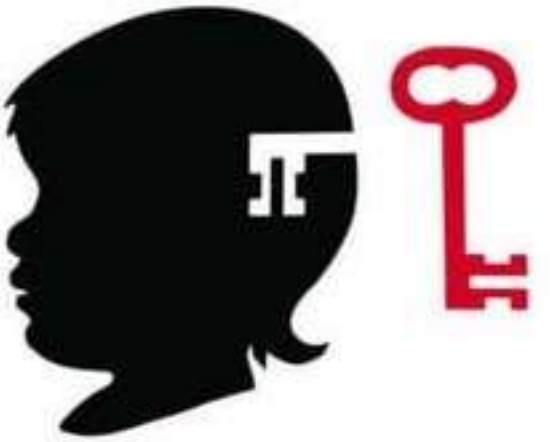
CLINICAL FEATURES

4A'S OF SCHIZOPHRENIA



SYMPTOMS

Positive Symptoms	Negative Symptoms
Hallucinations, Delusions, Formal thought disorders, Odd or Bizarre Behavior	Flat Effect, Alogia, Anhedonia, Avolition, Inattention, Self care deficit



FIRST RANK SYMPTOMS

- ❑ Audible thoughts,
- ❑ Voices Arguing,
- ❑ Voices commenting on 1's action,
- ❑ Thought withdrawal,
- ❑ Thought Insertion,
- ❑ Thought Broadcasting,
- ❑ Made feelings,
- ❑ Made Impulses,
- ❑ Made Volitional acts,
- ❑ Delusional perception &
- ❑ Somatic Passivity

Thoughts & Speech Disorders

- Autistic Thinking
- Loosening of Association
- Thought Blocking
- Neologism
- Poverty of Speech
- Poverty of Ideation
- Echolalia
- Perseverance (Persistent repetition of words Beyond the Point of relevance)
- Verbigeration (Senseless Repetition of words / Phrases)

- Delusions (Persecution, Grandeur, Reference, Control, Infidelity, Somatic Delusions, Bizarre)
- Over Inclusion (Irrelevant items in speech)
- Impaired Abstraction
- Concreteness
- Ambivalence

Disorders of Perceptions

- Hallucinations (Auditory, Visual, Tactile, Gustatory, Olfactory)

Disorders of Affect

- Apathy
- Emotional Blunting
- Emotional Shallowness
- Anhedonia
- Inappropriate Emotional Response

Disorders of Motor Behavior

- Increase / Decrease in Psychomotor activity
- Mannerisms
- Grimacing
- Stereotypes
- Decreased self-care
- Poor Grooming

Other Features

- Decreased in work Function
- Decreased social relationships
- Decreased Self care
- Inability to Concentrate
- Tension
- Insomnia
- Withdrawal Or Cognitive Deficits
- Loss of Ego Boundaries

- Loss of Insight
- Poor Judgment
- Suicide (presence of associated depression, Command Hallucination, Impulsive behavior or return of insight that causes the patient to Comprehend the devastating nature of the illness & take his Life)
- Usually no disturbance of Consciousness, Orientation, Attention, Memory & Intelligence
- No Underlying Organic Cause

ABC SYMPTOMS OF SCHIZOPHRENIA, BASED ON CLINICAL FEATURES

A – Autistic Thinking, Ambivalence, Anhedonia

B – Blunted Affect

C – Catatonic Behavior, Concreteness

D – Delusions

E – Echolalia, Echopraxia, Eccentric Behavior, Excitement

F – Functioning In Work Is Decreased, Frank Incoherence

G – Grimacing, Grooming Is Poor, Giggling

H – Hallucinations, Hostility

I – Illogical Thinking, Impulsive Behavior, Irrational Ideas

J – Judgment Is Poor

L – Loosening Of Association, Loss Of Ego Boundaries And Insight

M – Mannerisms, Made Impulses, Feelings, Volition And Acts

N- Neologisms, Negativism

O – Oddities Behavior

P – Perseveration, Poverty Of Speech And Ideation

R – Rigidity

S – Somatic Passivity, Suspiciousness, Stereotypes, Suicidal Ideas, Social Withdrawal.

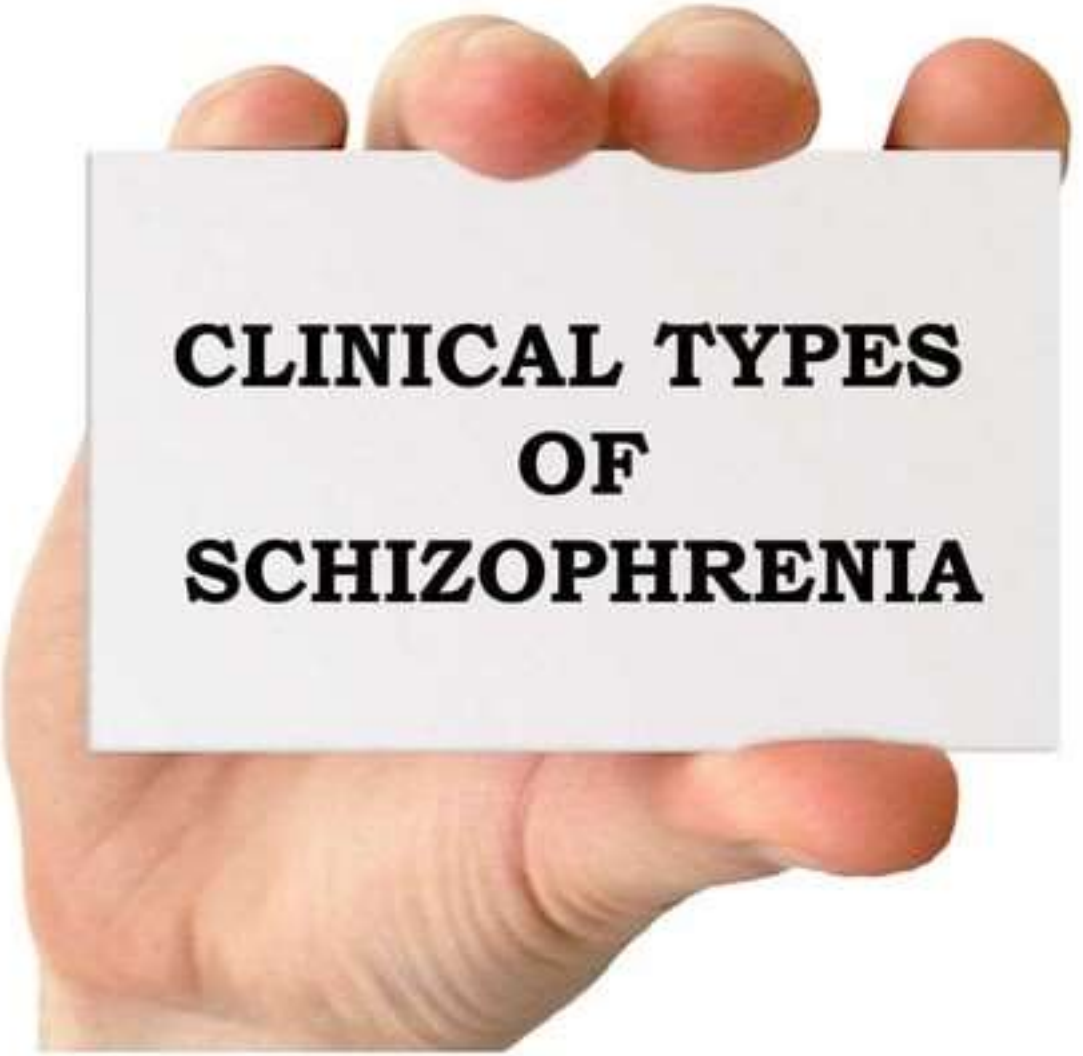
T – Thought Block, Insertion, Broadcasting , Withdrawal, Thought Echo.

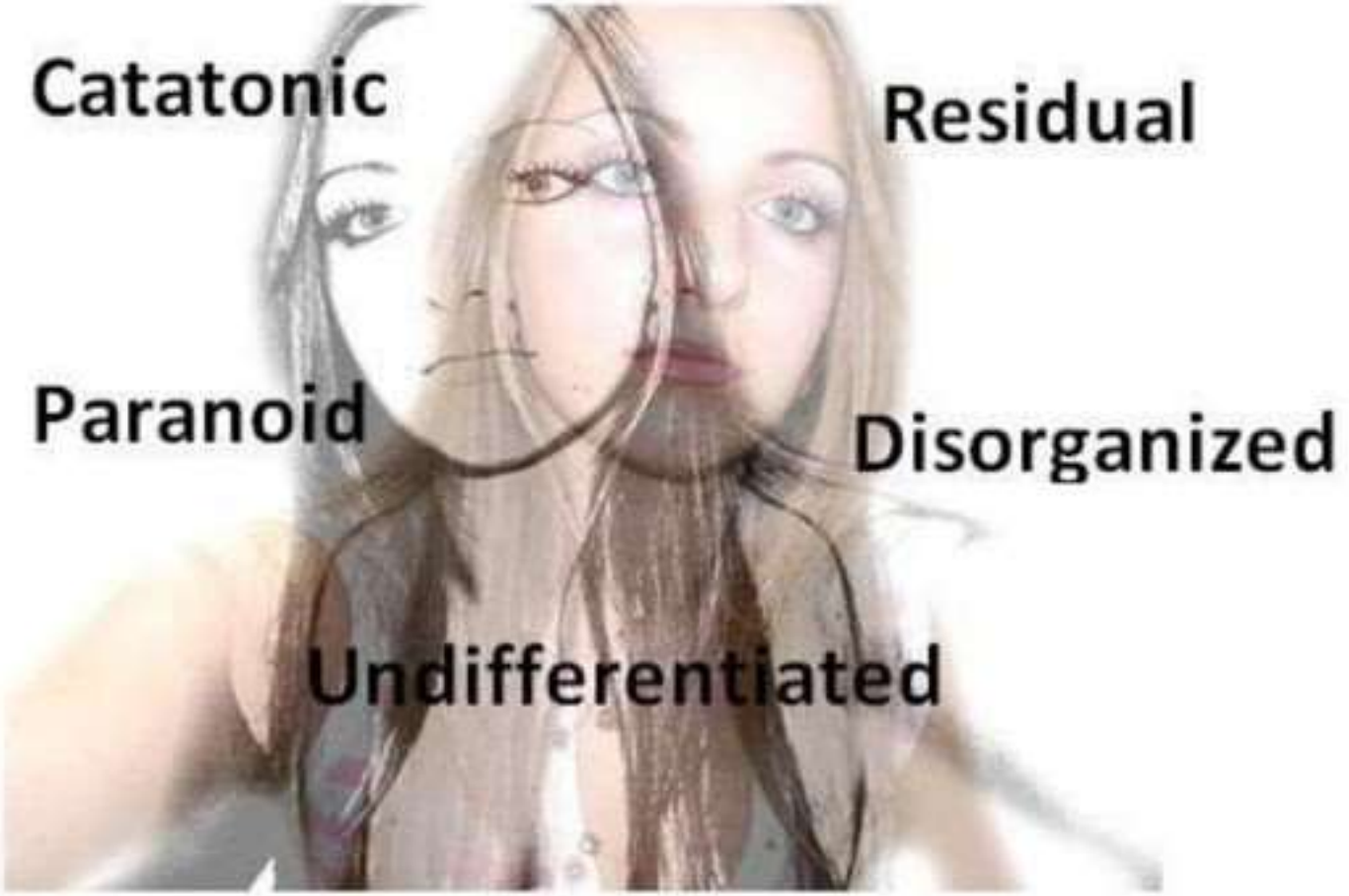
V – Verbigeration, Vague Hypochondrical Features

W- Waxy Flexibility, Wandering Tendencies

Core symptoms of schizophrenia

- Positive symptoms – hallucinations, delusions, agitation, disorganised thinking
- Negative symptoms – introversion, apathy, low self-esteem leading to personal neglect and more rarely catatonia
- Cognitive symptoms – poor memory, attention deficit, executive dysfunction
- Affective symptoms – depression , elation, suicidal ideation


CLINICAL TYPES
OF
SCHIZOPHRENIA


Catatonic
Residual
Paranoid
Disorganized
Undifferentiated

PARANOID SCHIZOPHRENIA

Paranoid means Delusional

Paranoid Schizophrenia is at present the most common form of Schizophrenia

It is characterized by following features

Delusions of Persecution

Conspired against, Cheated, Spied upon, Followed, Poisoned / Drugged, Maliciously maligned, harassed / Obstructed in the pursuit of long term goals.

Delusions of Jealousy

The person's sexual partner is Unfaithful

Delusions of Grandiosity

Irrational ideas regarding their own worth, talent, knowledge or power, may believe that they have a special relationship with famous persons, Assumption of the identity of a great religious leader

Auditory Hallucinations

Threaten or command the patient, Hallucinatory voices such as Whistling, humming, laughing

Other Features

Disturbance of affect (Blunt), Volition, Speech & Motor Behavior

It has good prognosis if treated early

Personal deterioration is minimal

Patients are productive and can lead a normal life

HEBEPHRENIC (DISORGANIZED) SCHIZOPHRENIA

It has an early & insidious onset and is often associated with poor premorbid personality

The essential features include,

- Thought disorders,
- Incoherence
- Severe loosening of associations
- Extreme social impairment
- Delusions & hallucinations are Fragmentary & Changeable

Other oddities of behavior include,

- Senseless Giggling,
- Mirror gazing,
- Grimacing
- Mannerisms & so on…

The course is chronic & progressively Downhill without significant remissions

Recovery Classically never occurs

One of the worst prognoses among all the subtypes.

CATATONIC SCHIZOPHRENIA

Cata means Disturbed

It is characterized by,

Marked disturbance of motor behavior,

FORMS:

- Catatonia Stupor
- Catatonia Excitement
- Catatonia Alternating between Excitement & stupor

Clinical Features of Excited Catatonia:

- ❖ Increased Psychomotor activity (Restlessness, Agitation, Excitement, Aggressiveness to at times Violent Behavior)
- ❖ Increased Speech production
- ❖ Loosening of Association
- ❖ Frank Incoherence
- ❖ Excitement becomes very severe and is accompanied by Rigidity, Pyrexia & Dehydration and can result in death

Then it is known as Acute Lethal Catatonia Or Pernicious catatonia.

Clinical Features of Retarded Catatonia (Catatonia Stupor)

- Mutism
- Rigidity (Maintenance of rigid posture against efforts)
- Negativism
- Posturing (Voluntary assumption of an inappropriate & Often Bizarre Posture for long Periods of time)
- Stupor

- Echolalia
- Echopraxia
- Waxy Flexibility (Parts of Body can be placed in positions for a long period of time, even if very uncomfortable)
- Ambitendency (A conflict to do or not to do)
- Automatic Obedience (Obeys every Command irrespectively)

CATATONIC SCHIZOPHRENIA

Rigid Posture

LOST TOUCH WITH REALITY

Mimicking Sounds

UNABLE TO SPEAK OR RESPOND

Odd Face Expression

LACK OF ACTIVITY

RESIDUAL SCHIZOPHRENIA

Symptoms Include,

- Emotional Blunting
- Eccentric Behavior
- Illogical Thinking
- Social Withdrawal
- Loosening of Associations

This category should be used when there has been at least one episode of schizophrenia in the past but without Prominent Psychotic Symptoms at Present.

UNDIFFERENTIATED SCHIZOPHRENIA

This category is diagnosed either when features of no subtype are fully present or features of more than one subtype are exhibited

SIMPLE SCHIZOPHRENIA

- Early & Insidious onset, Progressive Course & Presence of characteristic negative symptoms,
- Vague Hypochondriacal Features,
- Wandering Tendency,
- Self Absorbed idleness,
- Aimless activity,
- It differs from residual schizophrenia in that there never has been an episode with all the typical psychotic symptoms
- Prognosis is very poor.

POST – SCHIZOPHRENIC DEPRESSION

Depressive features develop in the presence of residual or active features of schizophrenia & are associated with an increased risk of suicide

COURSE & PROGNOSIS

The classic course is one of the exacerbations & remissions

It described as the most crippling & devastating of all illnesses

Several studies have found that over the 5 – 10 years period after the 1st psychiatric Hospitalization for schizophrenia, only about 10 – 20 % of patients as having a good outcome

More than50% of patients have a poor outcome, with repeated Hospitalizations.

PROGNOSTIC FACTORS IN SCHIZOPHRENIA

GOOD PROGNOSTIC FACTORS	POOR PROGNOSTIC FACTORS
Abrupt or Acute Onset	Insidious Onset
Later Onset	Younger Onset
Presence of Precipitating Factors	Absence of Precipitating Factors
Good Pre-morbid Personality	Poor Pre-morbid Personality
Paranoid & Catatonic Subtypes	Simple & undifferentiated Subtypes
Short Duration (<6months)	Long duration (>2years)
Predominance of Positive Symptoms	Predominance of Negative Symptoms
Family History of Mood Disorders	Family History of Schizophrenia
Good Social support	Poor Social Support
Female Sex	Male Sex
Married	Single, Divorced / Widowed
Out-patient treatment	Institutionalization

DIAGNOSTIC EVALUATION

- History Collection
- Physical Examination
- Neurological Examination
- Mental Status Examination

- Blood Investigations (Vitamin Deficiency, Uremia, Thyrotoxicosis, Electrolyte Imbalances, Agranulocytosis)

CT & MRI Scan

(Shows Enlarged ventricles, Enlargement of Sulci on the Cerebral Surface, Atrophy of the Cerebellum)

A person having an MRI scan

TREATMENT MODALITIES

PHARMACOTHERAPY :

Conventional Anti-Psychotics

Chlorpromazine 300-1500mg/day PO ;
50-100mg/day IM

Fluphenazine decanoate 25-50mg IM
Every 1-3 Weeks

Haloperidol 5-100mg/day PO ;
5-20mg/day IM

Trifluoperazine 15-60mg/day PO ;
1-5mg/day IM

Commonly Used Atypical Antipsychotics

Clozapine 25-450mg/day PO

Risperidone 2-10mg/day PO

Olanzapine 10-20mg/day PO

Quetiapine 150-750mg/day PO

Ziprasidone 20-80mg/day PO

Antidepressants (Imipramine, clomipramine, Sertraline, fluoxetine)

Mood stabilizers (Lithium, Carbamazepine, Sodium Valporate)

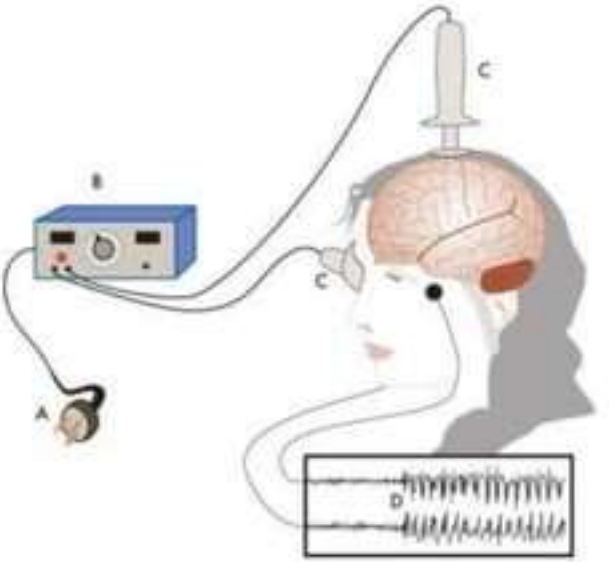
Anxiolytics (Diazepam, Lorazepam)

ELECTROCONVULSIVE THERAPY (ECT)

Indications:

- Catatonia Stupor
- Uncontrolled Catatonia Excitement
- Severe Side-effects with drugs
- Schizophrenia Refractory to all other Forms of treatment

Usually 8-12 ECTs are needed



PSYCHOLOGICAL THERAPIES

- Psychotherapy
- Group Therapy
- Behavior Therapy
- Social Skills training
- Cognitive Therapy
- Family Therapy

PSYCHOSOCIAL REHABILITATION

- Activity therapy to develop work habit
- Training in a new Vocation or retaining in a previous Skills
- Vocational Guidance
- Independent Job Placement

NURSING INTERVENTIONS

- Observe behavior pattern, Posturing, Appearance, Psychomotor, Disturbance, Hygiene
- Identify the type of Disturbance the patient is Experiencing
- Ask the patient about feelings while thought alterations are Evident
- Note the Effect & Emotional tone of the patient & whether they are appropriate in relation to the thought or present situation
- Assess the Speech Patterns associated with the Delusions

- Assess for the Theme & Content of Delusional thinking. If the delusion is Persecution oriented, assess the nature of the threat & risk for Violence
- Assess the ability to perform Self care activity (sleep pattern & Interaction with other patients)
- Determine any suicidal intent or recent attempts that have been made

OBJECTIVE SIGNS & SUBJECTIVE SYMPTOMS OF SCHIZOPHRENIA

OBJECTIVE SIGNS	SUBJECTIVE SYMPTOMS
○ Withdrawal Behavior ○ Hostility ○ Inadequate or Inappropriate Communication / Speech ○ Inadequate food & fluid Intake ○ Psychomotor Agitation ○ Catatonic Rigidity ○ Stereotype Behavior ○ Apathy ○ Ambivalence ○ Mutism ○ Inability to Trust others	○ Hallucinations ○ Illusions ○ Paranoid thinking ○ Anhedonia ○ Confusion ○ Ideas of Reference ○ Thought Blocking ○ Retarded thinking ○ Insomnia

NURSING DIAGNOSIS

- Disturbed thought Process related to inability to trust, Panic anxiety, Possible Hereditary Or Biochemical Factors evidenced by Delusional thinking, Extreme Suspiciousness of others
- Ineffective health maintenance related to inability to trust, Extreme suspiciousness evidenced by poor diet intake, inadequate food & Fluid intake, difficulty in falling asleep
- Self-care deficit related to withdrawal, regression, panic anxiety, cognitive impairment, inability to trust evidenced by difficulty in carrying out tasks associated with hygiene, dressing, grooming, eating, sleeping and toileting

- Potential for violence, self directed or at others, related to command hallucinations evidenced by physical violence, destruction of objects in the environment or self destructive behavior.
- Risk for self inflicted or life threatening injury related to command hallucinations evidenced by suicidal ideas, plans or attempts.
- Disturbed sensory - perception (auditory / visual) related to panic anxiety anxiety, possible hereditary or biochemical factors evidenced by inappropriate responses, disordered thought sequencing, poor concentration, disorientation, withdrawn behaviour

- Social isolation related to inability to trust, panic anxiety, delusional thinking, evidenced by withdrawal, sad, dull affect, preoccupation with own thoughts, expression of feelings of rejection of aloneness imposed by others.
- Impaired verbal communication related to panic anxiety, disordered, unrealistic thinking, evidenced by loosening of associations, echolalia, verbalizations that reflect concrete thinking and poor eye contact.
- Ineffective family coping related to highly ambivalent family relationships, impaired communication evidenced by neglectful care of the patient, extreme denial or prolonged over concern regarding his illness.

OTHER PSYCHOTIC DISORDERS

The term psychosis is defined as gross impairment in reality testing, marked disturbance in personality with impaired social and occupational functioning and presence of characteristic symptoms like delusions and hallucinations

ICD - 10 CLASSIFICATION

F22 Persistent Delusional Disorders

F23 Acute And Transient Psychotic Disorders

F24 Induced Delusional Disorders

F25 Schizoaffective Disorders

Capgra's Syndrome (Delusion Of Doubles)

PERSISTENT DELUSIONAL DISORDERS

It is relatively stable & chronic course, characterized by presence of well systematized delusions of non – Bizarre type

The emotional response & behavior of the person is often understandable in the light of Delusions

The behavior outside the limits of delusions is almost Normal

CLINICAL FEATURES :

- Persistent Delusions (Atleast for 3 Months)
- Absence of significant / persistent hallucinations
- Absence of organic mental disorders, Schizophrenia, Mood disorders

Very often these individuals are able to carry on a near normal social & occupational life without arousing suspicion regarding the delusional disorder

ACUTE & TRANSIENT PSYCHOTIC DISORDERS

These disorders neither follow the course of schizophrenia nor resemble mood disorders in clinical picture & usually have a better prognosis than schizophrenia

The onset is abrupt or acute, associated with identifiable acute stress

A complete recovery usually occurs within 2 – 3 months

CLINICAL FEATURES

- Several types of hallucinations, delusions, changing in both type & intensity from day to day or within the same day
- Marked emotional turmoil, which ranges from intense feelings of happiness & ecstasy to anxiety & irritability
- Do not fulfill the criteria for Schizophrenia

INDUCED DELUSIONAL DISORDERS

This is an uncommon Delusional disorder characterized by,

Sharing of delusions between usually 2 or occasionally more persons, who usually have a closely knit emotional bond.

Only one has the 'Genuine' Delusions due to an underlying psychiatric disorder

On separation of the 2, while the dependent individual may give up his delusions,

The patient with the 'genuine' Delusions Should then be treated appropriately

SCHIZOAFFECTIVE DISORDER

In this disorder, the symptoms of schizophrenia & mood disorders are prominently present within the same episode.

Types:

Schizoaffective disorder – Depressed type

Schizoaffective disorder – Manic type

Schizoaffective Mixed type

CAPGRAS SYNDROME
(Delusion of Double)

It is characterized by delusional conviction that the other person in the environment is not their real selves but is their own doubles.

It is one of the delusional misidentification syndromes

<u>Treatment:</u>

- Antipsychotics
- Mood stabilizers
- Antidepressants
- ECT
- Supportive Psychotherapy

GERIATRIC CONSIDERATIONS

- Schizophrenia, a severe & persistent mental illness with an onset in early adulthood, is not usually associated with older adults
- Prevalence was thought to decline with aging as a result of early mortality, Decreased symptom severity & recovery
- Late – onset schizophrenia (after 45years) , More Prevalent in women than in Men Characterized by Paranoid delusions. It has Varying in degree of Impairment, but the Psychopathology decreases with age

- **Psychotic Symptoms that appear in late life are usually associated with depression or dementia, not schizophrenia**
- **Patients may respond to supportive therapy and low doses of Atypical Antipsychotic Drugs.**

PSYCHO EDUCATION

- Explain the patient & family that schizophrenia is a chronic disorder with symptoms that affect the person's thought process, mood , emotions & Social functions throughout the person's life time
- Teach the patient & Family About the importance of medication compliance and the therapeutic / Non – therapeutic effects of antipsychotic medications

- Instruct the patient & Family to recognize impending symptom exacerbation and to notify physician when the patient poses a threat / danger to self or others& requires hospitalization
- Teach the patient & family to identify Psychosocial / family stressors that may exacerbate symptoms of the disorder & methods to prevent them

REHABILITATION

The focus of psychiatric rehabilitation is strengthening self care & promoting& improving quality of life through relapse prevention

It has improved outcomes by ,

- **Providing Community , Family Support Services to decrease hospital Readmission rates & increase Community Integration**
- **Social skills training**
- **Vocational Rehabilitation**
- **Half-Way Homes**
- **Long-term Homes**
- **Closer Supervision**
- **Day Hospitals, etc.,**


感謝你
Danke
Gracias
Grazie
Merci
Thanks!
THANK YOU!