

## INTRODUCTION

- The simplest way to Conceptualize a Psychiatric disorder is a Disturbance of Cognition (thought), Conation (action), and Affect (feelings/emotions) or any disequilibrium between three domains. A Psychiatric Disorder should be a manifestation of behavioural, psychological, and /or Biological dysfunction that Person.
- Classification is the Process by which phenomenon are organized into categories. Classification of psychiatric disorders, are syndromal. A syndrome is defined as a group of symptoms and signs that often occur together, and delineate a recognizable clinical condition.

### There are three major purposes of classification of psychiatric disorders:

1. To enable Communication regarding the diagnosis of disorders,
2. To Facilitate comprehension of the underlying causes of these disorders, and
3. To aid Prediction of the prognosis of psychiatric disorders.

The Syndromal approach of classification, in the absence of clearly known aetiologies, fulfils these purposes reasonably well.

### CLASSIFICATION IN PSYCHIATRY:

1. ICD 10 (International Statistical Classification of Diseases, 10th Revision, 1992) is WHO's classification for all diseases and related health problems (and not only psychiatric disorders)
2. DSM-IV- TR (Diagnostic and Statistical Manual of Mental Disorders, IV Edition, Text Revision, 2000) is the APA's (American Psychiatric Association's) classification of mental disorders.
3. DSM-V

DSM-IV-TR is a text revision of the DSM-IV published in 1994.)

### TABLE: SOME VERSIONS OF ICD-10

1. Clinical Descriptions and Diagnostic Guidelines (CDDG)
2. Diagnostic Criteria for Research (DCR)
3. Multi-axial Classification Version
4. Primary Care Version

### THE FIVE AXIS OF DSM- IV-TR

AXIS I: Clinical psychiatric Diagnosis

AXIS II: Personality Disorders and Mental Retardation

AXIS III: General Medical Conditions

AXIS IV: Psychosocial and Environmental Problems

AXIS V: Global Assessment of Functioning: Current and in past one year ( Rated on a Scale )

### CLASSIFICATION OF PSYCHIATRIC DISORDERS

1. Organic
  - a. Acute e.g. confusional state
  - b. Chronic e.g. dementia
2. Schizophrenia
3. Affective disorder :
  - a. Depression b. Mania
4. Neurotic disorders
  - a. Anxiety disorders
    - i. Generalized anxiety ii. Phobias iii. Panic attacks
  - b. Obsessive compulsive disorder c. Hysteria
  - d. Hypochondriasis e. Factitious disorders
5. Personality disorders
6. Others
  - a. Alcoholism b. Drug dependence c. Eating disorders
    - i. Anorexia nervosa ii. Obesity
  - d. Psychosexual disorders

**II. Organic and Functional disorders:**

	ORGANIC	FUNCTIONAL
Onset	Acute	Gradual
Age	Old age	Young
Consciousness	Impaired; disorientation	Alert
Hallucinations	Visual	Auditory
Alcohol/drug use	+++	+/-
Neurological symptoms	Present	Absent
Examples	Delirium	Schizophrenia
Diseases	Dementia	Bipolar disorder

**III. Psychosis and Neurosis**

	Psychosis	Neurosis
Insight	Absent	Present
Personality	Affected	Preserved
Reality testing	Absent	Present
Judgement	-	+
Delusions	+	-
Hallucinations	+	-
Disorganised speech	+	-
Disorganised behaviour	+	-
Example	Schizophrenia	Neurotic depression (MC)
	Mania/bipolar disorder	Anxiety disorders
	Acute psychosis	Somatoform disorders
	Psychotic depression	Sexual disorders

**Basic Examination of Psychiatric patient done under following heading:**

MENTAL STATE EXAMINATION

MENTAL STATUS AND BEHAVIOR

1. General Appearance and Behavior
  - I. General Appearance
  - II. Attitude towards Examiner
  - III. Comprehension
  - IV. Gait and Posture
  - V. Motor Activity
  - VI. Social Manner
  - VII. Rapport

**2. Speech**

- I. Rate and Quantity
- II. Volume and Tone
- III. Flow and Rhythm

**3. Mood and Affect****4. Thought**

- I. Stream and Form
- II. Content

**5. Perception****6. Cognition (Higher Mental Functions)**

- i. Consciousness
- ii. Orientation
- iii. Attention
- iv. Concentration
- v. Memory
- vi. Intelligence
- vii. Abstract thinking

**7. Judgment****8. Insight****GENERAL APPEARANCE:**

1. Rapport (doctor-patient relationship): absent in Psychosis

Built: Schizophrenia: asthenic (thin), athletic

Bipolar disorder: pyknic (fat)

2. Psychomotor activity: Retardation in depression

Agitation in mania

Mannerism: Ingrained, habitual involuntary goal directed movement.

Automatism: Automatic performance of an act or acts generally representative of unconscious symbolic activity.

**Akathesia: -**

- Subjective feeling of Motor Restlessness secondary to antipsychotic or other Medication, which can cause restlessness, pacing, repeated sitting and standing: can be mistaken for psychotic agitation

**Floccillation:-**

- aimless picking usually at clothing or bed, clothes, commonly seen in delirium.

**Twirling:-**

- A sign present in autistic children who continually rotate in the direction in which their head is turned.

Automatism (automatic behaviour): temporal lobe epilepsy

**3. Speech:**

- Reaction time: Increased in depression, decreased in mania
- Relevance: Irrelevant in schizophrenia, normal in children
- Coherence (meaning): Incoherence in psychosis
- Coprolalia (abusive words): Tourette's disorder

**THOUGHT:****A. STREAM:** the rate of flow of ideas

- Flight of ideas: rapid, pressure, increased amount, shifting from one topic to another, chance associations, not goal-directed; seen in mania

**Prolivity:** goal-directed rapid thought; seen in hypomania

**Thought block:** sudden stoppage of thought; characteristically in schizophrenia

**Circumstantiality:** boring details; Normal, Classically described for epileptic personality.

Perseveration: repeated responses beyond point of relevance in response to stimuli; dementia (frontal lobe Lesions in Schizophrenia)

**B. CONTENT:**

Overvalued idea: unreasonable, sustained false belief maintained less firmly than a delusion

**Delusion:** Fixed, firm, unshakable belief in something that is not a fact, not shared by other people in community and also not matching with socio-cultural background of the person.

**Types of delusion:** Persecutory: harming

Referential: Things is surrounding have special meaning to self

Grandeur: special power, money, status (mania)

Cotard's syndrome **Nihilistic** (Also called as Cotard's deity): nothing exists (depression)

Bizarre: Physically impossible & logically implausible :- (found in schizophrenia)

**Capgras syndrome** Delusion of doubles: familiar person replaced by someone

Declerambault's syndrome Erotomanic: delusion of love

**Othello's syndrome** - Del of infidelity: alcoholism (Othello syndrome)

Noesis : a revelation in which immense illumination occurs in association with a sense that a person has been chose to lead and command.

Convade's syndrome : Delusion of being pregnant by male partner when female partner is pregnant

Unio mystica : an oceanic feeling of mystic unity with an infinite power, not considered a disturbance in thought content if congruent with person's religious or cultural milieu. Mood-congruent delusion: delusion and mood are congruence with each other (mood disorders)

Mood-incongruent delusion: no match between delusion and mood (schizophrenia)

**C. POSSESSION:** The components examined under this are :

- a. Thought block ; Sudden blockage of train of thoughts as if somebody put a block in the thoughts.
- b. Obsession: repeated intrusive thoughts, OCD.
- c. Thought alienation: thoughts controlled by someone( schizophrenia)
  - I. i: Thought insertion --- somebody inserting thoughts in my mind.
  - II. ii: Thought Withdrawal--- Somebody withdrawing thoughts from my mind
  - III. iii: Thought Broadcasting --- Patient would say that his thoughts are been known to everybody.

**D. FORM:** the way thoughts are put: abnormalities characteristic of Schizophrenia

**Loosening of association:** No connections between **successive** thoughts, one of 4A's of schizophrenia as by Bleuler's

**Word salad:** - No connections between words, speech only a jargon of words, also called as **Verbigeration**.

**Neologism:** coining new word or using old words in unique way - most characteristic of schizophrenia

**Tangentiality:** Connection between thoughts loses in between and Goal is not achieved.

Circumstantiality: Unnecessary, tedious, boring details are conveyed before conveying the actual thought (Here the Goal is achieved).

4. **AFFECT:** emotional state as seen by examiner at a point of time (Mood is persistent subjective emotional state of the person)

**Quality:** low in depression

**Mood:** A pervasive and sustained emotion subjectively experienced and reported by a patient and observed by others: examples include depression, elation, and anger.

- I. Dysphoric mood : an unpleasant mood.
- II. Euthymic mood : Normal range of mood, implying absence of depressed or elevated mood.
- III. Expansive mood : a person;s expression of feeling without restraint, frequently with an overestimation of their significance or importance.
- IV. Irritable mood : A state in which a person is easily annoyed and provoked to anger.
- V. Mood swings (labile mood) : Oscillations between euphoria and depression or anxiety.
- VI. Elevated mood : Air of confidence and enjoyment a mood more cheerful than usual.
- VII. Euphoria : Intense elation with feelings of grandeur.
- VIII. Ecstasy : Feeling of intense rapture.
- IX. Depression : Psychopathological feeling of sadness.
- X. **Anhedonia** : Loss of interest in and withdrawal from all regular and pleasurable activities, often associated with depression.
- XI. **Alexithymia** : A person's inability to describe of difficulty in describing or being aware of emotions or mood.
- XII. Abreaction : Emotional release or discharge after recalling a painful experience. Range: (spectrum of emotions): blunted or flat affect in schizophrenia; no emotional expressions Appropriateness: inappropriate affect in schizophrenia. Emotions are controlled by **FRONTAL LOBE**

5. **PERCEPTION:** is what we all perceive from our sensory organs, of the environmental stimuli like touch, taste, smelling, hearing & vision.

**Illusion:** misinterpretation of stimulus; seen in delirium, may be normal in hyper anxiety state.

**Hallucination:**

1. False perception without stimulus
2. Clear, 3 dimensional, vivid, Live
3. Occurs in objective space
4. Insight is absent
5. Sensory organs are not involved.
6. No voluntary control

Visual: organic disorders

Auditory: Functional disorders, Not under voluntary control.

Tactile: cocaine, Olfactory: Temporal lobe epilepsy

Imagery: Incomplete, not clear, subjective space, can be controlled voluntarily, Insight is present.

**Special type of Hallucinations**

- a. Hypnagogic Hallucination - Hallucinations while going to sleep. (found in Narcolepsy)
  - b. Hypnopompic Hallucination - Hallucinations while waking up from sleep.
  - c. Extra campine Hallucination - Hallucination beyond the limits of sensory apparatus. Eg. Hearing voices from America while in India or seeing something behind him without turning one's head .
  - d. Reflex Hallucination - also called as Synesthesia. Stimulus in one modality causes Hallucination in other modality. eg. Hearing of Human voices whenever seeing Red colour. Commonly occurs in Cannabis and LSD use. e.g Colors are being heard and music is been seen
  - e. Functional Hallucination - Stimulus in one modality causes Hallucinations in same modality. eg. Hearing of Human voices whenever temple bells rings.
  - f. Autoscopy - Viewing one self or transparent image of oneself.
  - g. Negative autoscopy - Looking into mirror and mirror is blank. (No image is seen in mirror)
  - h. Complex Hallucination - Hallucinations in two or more modalities occurring simultaneously. e.g Hearing and seeing somebody at same time
6. **ORIENTATION:** in time, place and person; loss occurs in this sequence, recovery in reverse order  
Disorientation in delirium: Orientation is the normal state of (oneself and one's surrounding in terms of time, place and person.

Torpor - general lowering of consciousness without hallucinations, illusions & delusions & restlessness. The client is apathetic, generally slowed down, unable to express themselves clearly & may perseverate. Commonly seen in high fever.

**Twilight state** It is disturbed consciousness with hallucinations. In this there is a restriction of the consciousness to one idea or thought. A transitory disturbance of consciousness during which many acts, sometimes very complicated may be performed without the subjects conscious volition and without retaining any remembrance of them.

**Oneiroid state / Onirism**

It is dream state, while one is awake, a waking dream. To a person it seems that whatever he is doing is actually doing in dream,

**Delirium**

Acute reversible cognitive disorder with relatively global impairment, consisting of deficits of attention, arousal, consciousness, memory, orientation, perception, and speech or language.

**Akinetic mutism**

It may be of two types-

- The patient lay inertly in bed mute and almost totally unresponsive, although he followed the movements of people around him with his eyes. H. Cairn described this state due to tumor of 3rd ventricle, hence known as Cairn stupor. The syndrome is probably a result of interference with RAS, so that response to environment stimuli is defective. The term has also been used to describe subjects with bilateral frontal lobe lesions who lack all drive and impulse to action, despite intact motor and sensory tracts.

**Coma vigil. Pseudocoma / locked in syndrome / Deafferented state.**

It is a state in which patient appears to be asleep but can be aroused. The subject is conscious and aware but is unable to respond. The lesion is in ventral **pons** with preservation of dorsal **tegmental** area, the activating

system is intact but interruption of corticobulbar and spinal pathways make it impossible for the subject to move or speak.

**Stupor**

It is a triad of

1. State of decreased reactivity to stimuli.
2. Unresponsiveness with immobility (Akinesia)
3. Mutism but retention of consciousness & often with open eyes that follows external objects.

**Memory:**

Function by which information stored in the brain is later recalled to consciousness.

Immediate and recent memory are stored in Hippo campus and long term memory stored in Neocortex.

The conversion of immediate and recent memory to long term memory occurs in HippoCampus.

Immediate (few min), Recent ( short term memory )(few hours to few days ), Remote also called as long term memory (few months, years)

Types	Duration	Testing	Stored in
Immediate	Few seconds to five minutes	Showing three dissimilar objects and asking	Hippocampus
Recent	Five minutes to seven days	Asking same above objects after five minutes	Hippocampus
Remote	Memories of lifetime events	Date of Birthdays Anniversary etc.	Cortex

a. Disturbances of memory:

I. **Amnesia:** partial or total inability to recall past experiences: may be organic or emotional in origin.

1. Anterograde: amnesia for events occurring after a point in time.
2. Retrograde: amnesia for events occurring before a point in time.

II. **Paramnesia:** falsification of memory by distortion of recall

1. Fausse reconnaissance: false recognition.
2. Retrospective falsification: Memory becomes unintentionally (unconsciously) distorted b) being filtered through a person’s present emotional cognitive and experiential state.
3. Confabulating: unconscious filling of gaps in memory imagined or untrue experiences that a person believes but that have no basis in fact: most often associated with organic pathology.
4. False memory: a person recollection and belief by the patient of an event that did not actually occur.

Déjà vu:	unfamiliar events look familiar,	] - usually found in temporal lobe epilepsy - in normal people - in Heightened Anxiety states.
Jamais vu:	familiar events appear unfamiliar	
Deja entendu:	is the illusion that what one is hearing, was heard previously	
Deja pense:	in which a new thought is regarded as repetition of a previous thought.	

**10. ABSTRACT THINKING:** ability to understand the essence of a whole, hidden meanings

Concrete thinking: literal meanings; in schizophrenia

Tested by:

1. Proverb testing
2. Similarity testing  
eg. Similarity B/W Car & Aeroplane  
Both have tyres – Concrete thinking  
Run by petrol – Semi-abstract  
Both are Modes of transport - Abstract

Similarly Between table & Chair is

- a. Both have four legs - Concrete
- b. Both made of wood - Semi-abstract
- c. Both are furniture - Abstract

11. **INSIGHT:** awareness about illness, absent in psychosis and present in neurosis.

The various stages of human life according to Erik- Erikson’s, who presented a psychosocial theory of development that describes crucial steps in people relationships with the social world, based on the interplay between biology and society. are.

Erikson’s Psychosocial Stages

**Table : Erikson’s Psychosocial Stages**

<b>Psychosocial Stage</b>	<b>Associated Virtue</b>	<b>Related Forms of Psychopathology</b>	<b>Positive and Negative Forerunners of Identity Formation</b>	<b>Enduring Aspects of Identity Formation</b>
Trust vs. mistrust (birth -)	Hope	Psychosis Addictions Depression	Mutual recognition vs. autistic isolation	Temporal perspective vs. time confusion
Autonomy vs. shame and doubt (~18 months -)	Will	Paranoia Obsessions Compulsions Impulsivity	Will to be oneself vs. self-doubt	Self-certainty vs. self-consciousness
Initiative vs. guilt (~3 years- )	Purpose	Conversion disorder Phobia Psychosomatic disorder Inhibition	Anticipation of roles vs. role inhibition	Role experimentation vs. role fixation
Industry vs. inferiority (~5 years-)	Competence	Creative inhibition Inertia	Task identification vs. sense of futility	Apprenticeship vs. work paralysis
Identity vs. role confusion (~13 years -)	Fidelity	Delinquent behavior Gender-related identity disorders Borderline psychotic episodes		Identity vs. identity confusion
Intimacy vs. isolation (~20s -)	Love	Schizoid personality disorder Distantiation		Sexual polarization vs. bisexual confusion
Generativity vs. stagnation (~40s-)	Care	Mid-life crisis Premature invalidism		Leadership and followership vs. abdication of responsibility
Integrity vs. despair (~60s-)	Wisdom	Extreme alienation Despair		Ideological commitment vs. confusion of values

**Jean Piaget**

**Piaget described the four major stages leading to the capacity for adult thought. Each stage is a prerequisite for the following one.**

Table - Stages of Intellectual Development Postulated by Piaget

Age (Yr)	Period	Cognitive Developmental Characteristics
0 - 1.5 (to 2)	Sensorimotor	<p>in this the infants begins to learn through sensory observation, and gain control of their motor functions through activity Divided into six stages, characterized by:</p> <ol style="list-style-type: none"> <li>1. Inborn motor and sensory reflexes</li> <li>2. Primary circular reaction</li> <li>3. Secondary circular reaction</li> <li>4. Use of familiar means to obtain ends</li> <li>5. Tertiary circular reaction and discovery through active experimentation</li> <li>6. Insight and object permanence</li> </ol>
2 -7	Preoperations	<p>in this stage , children use symbols and language more extensively than in sensorimotor stage. Deferred imitation, symbolic play, graphic imagery subperioda (drawing), mental imagery, and language</p>
7 -11	Concrete	<p>In this, children operate and act on the concrete, real, and perceivable world of objects and events. Conservation of quantity, weight, volume, length, operations and time based on reversibility by inversion or reciprocity; operations; class inclusion and seriation</p>
11 -end of adolescence	Formal operations	<p>in this thinking operates in a formal highly logical, systematic, and symbolic manner. Combinatorial system, whereby variables are isolated and all possible combinations are examined; hypo thetical-deductive thinking</p>

This sub-period is considered by some authors to be a separate developmental period.



MULTIPLE CHOICE QUESTIONS

1. Mutism and akinesia in a person who appears awake and even alert, s best described as:
  - a. Twilight state
  - b. Oneroid state
  - c. Stupor
  - d. Delirium
2. The following is suggestive of an organic cause of the behavioural symptoms.
  - a. Formal thought disorder
  - b. Auditory hallucinations
  - c. Delusion of Persecution
  - d. Prominent visual hallucination
3. Consultation- liaison(CL) psychiatry involve diagnosing.
  - a. Psychiatric illness in medically ill
  - b. Medical illness in psychiatric patient
  - c. Suicidal tendency in psychiatric patient
  - d. Suicidal tendency in medically ill.
4. A person who laughs one minute and cries the next without any clear stimulus is said to have.
  - a. Incongruent effect
  - b. Euphoria
  - c. Labile affect
  - d. "Spilt personality
5. A 25 year old woman complains of intense depressed mood for 6 months with inability to enjoy previously pleasurable activities. This symptom is known as:
  - a. Anhedonia
  - b. Avolition
  - c. Apathy
  - d. Amotivation
6. A 25 year old university student had a fight with the neighboring boy. On the next day while out, he started feeling that two man in police uniform were observing this movements. When he reached home in the evening he was frightened. He expressed that police was after him and would arrest him. His symptoms represent:
  - a. Delusion of persecution
  - b. Ideas of reference
  - c. Passivity
  - d. Thought insertion
7. A man hits his neighbour. Next day he feels that police is behind him and his brain is being controlled by radio waves by his neighbour. The probable diagnosis is:
  - a. Thought insertion
  - b. Passivity feeling
  - c. Psychosis
  - d. Obscive Compulsive Disorder
8. Conation is
  - a. Perception
  - b. Thought
  - c. Action
  - d. Feeling
9. The primary delusion is disorder of
  - a. Thought
  - b. Perception
  - c. Loosening of association
  - d. Memory
10. Delusion is a disorder of
  - a. Perception
  - b. Thought
  - c. Memory
  - d. Judgement
11. Delusion is not present in
  - a. Delirium
  - b. Mania
  - c. Depression
  - d. Compulsive disorder
12. A patient seen a rope and fears like a snake. It is called:
  - a. Ilusion
  - b. Hallucination
  - c. Delusion
  - d. Depresonalization
13. False sense of perception without any external object or stimulus is known as:
  - a. Ilusions
  - b. Impulse
  - c. Hallucination
  - d. Phobia
14. Lack of insight is not a feature of:
  - a. Panic disorder
  - b. Schizopheria
  - c. Mania
  - d. Reactive Psychosis
15. Hallucination is disorder of
  - a. Thought
  - b. Perception
  - c. Memory
  - d. Intelligence
16. All of the following feature of hallucination EXCEPT
  - a. Depends on will of observer
  - b. Occur in inner subjective space
  - c. It is vivid as sensory perception
  - d. It occurs in absence of perception stimulus
17. All of the following are features of hallucinations, except:
  - a. It is dependent of the will of the observer
  - b. Sensory organs are not involved
  - c. It is as vivid as that in a true sense perception
  - d. It occurs in the absence of a percetual stimuls.

18. Formed visual hallucinations are seen in lesion of:
  - a. Frontal
  - b. Occipital
  - c. Temporal
  - d. Parietal
19. Following are correctly matched except
  - a. Schizophrenia-Audiory hallucination
  - b. OCD-infidelity
  - c. Alcoholism-auditory hallucination
  - d. Depression-guilt feeling
20. Confabulation is defect of
  - a. Memory
  - b. Intelligence
  - c. Attention
  - d. Concentration
21. Confabulation means
  - a. Misinterpretation of stimuli
  - b. Perception in absence of stimuli
  - c. Making stories to cheat some one
  - d. Making stories to fill gaps in memory loss.
22. Difference between neurosis and psychosis by:
  - a. Severity
  - b. Insight
  - c. Clinical features
  - d. Duration
23. Most specific of psychosis
  - a. Neologism
  - b. Incoherence
  - c. Pressure of speech
  - d. Perseveration
24. Impaired insight is evident in
  - a. Psychosomatic disorder
  - b. Anxiety neurosis
  - c. Post Traumatic Stress Disorder
  - d. Schizophrenia
25. Signs of organic brain damage are evident on:
  - a. Bender Gestalt Test
  - b. Rorschach Test
  - c. Sentence Completion Test
  - d. Thematic Apperception Test
26. Ambivalence is most commonly seen in
  - a. Schizophrenia
  - b. Hysteria
  - c. Mania
  - d. OCN
27. Most common psychological features of AIDS is
  - a. Mania
  - b. Depression
  - c. Suicidal Tendency
  - d. Violence
28. Pseudo dementia is seen in:
  - a. Alcoholism
  - b. Depression
  - c. Schizophrenia
  - d. Mania
29. Emotion is controlled by:
  - a. Limbic system
  - b. Frontal lobe
  - c. Temporal lobe
  - d. Occipital lobe
30. Chandu 32 years male presents with abdominal pain and vomiting. He also complain of some psychiatric symptoms& visual hallucination. Most likely diagnosis is
  - a. Hypothyroidism
  - b. Hyperthyroidism
  - c. Hysteria
  - d. Intermittent Porphyria
31. Incidence of suicide is a.
  - a. 8-10/100 population
  - b. 8-10/10000 population
  - c. 8-10/1lac population
  - d. 8-10/10lac population
32. Pin-point pupil is seen in:
  - a. Pontine haemorrhage
  - b. Barbiturate poisoning
  - c. Glaucoma
  - d. Congenital cataract
33. Visual analogue scale(VAS) most widely used to measure
  - a. Sleep
  - b. Sedation
  - c. Pain intensity
  - d. Depth of Anaesthesia
34. Allodynia is
  - a. Feeling pain without stimulus
  - b. Feeling pain to a normal painful stimulus
  - c. Both
  - d. None
35. Déjà vu is seen in:
  - a. Temporal lobe epilepsy
  - b. Normal person
  - c. Psychosis
  - d. All of the above
36. Unfamiliarity of familiar things is seen in:
  - a. Déjà vu
  - b. Jamais vu
  - c. Deja entendu
  - d. Deja pence
37. Best test for diagnosis of organic mental disorder
  - a. Sentence completion test
  - b. Bender gestalt test
  - c. Rorschach test
  - d. Thematic Appreciation test
38. Reflex hallucination is a type of (AIIMS May 09)
  - a. Paraesthesia
  - b. Synesthesia
  - c. Hyperesthesia
  - d. Kinesthesia

39. Which is not true about Hallucination? (AIIMS May 09)
- It is as vivid as normal stimulus
  - It occur in inner subjective space
  - It is independent of will of observer
  - It occurs in absence of perceptual stimuli

40. 1 week before incidence recall is called as (AIIMS Nov 09)
- Recent memory
  - Remote memory
  - Working memory
  - Delayed memory

**ANSWER KEY-**

- C
- D
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## Psychological Tests

In psychiatry, to understand the Client in **toto** and to confirm the diagnosis we use the various psychological tests, these are basically classified into two types :

(I) Subjective (II) Objective (Projective)

Subjective tests: These are basically used to understand the psychopathology in detail, but patient might manipulate in this.

Projective tests: Unstructured stimuli given to the subject. While responding the person projects his own ideas and personality. in this the person cannot manipulate and reality of Client.

The various projective (objective) tests are:-

### I. Tests For Personality

- a. MMPI (Minnesota Multiphasic Personality Inventory (16 years – adult)
- b. 16 P F (16 personality factors)

### II. Tests for psychiatric diagnosis.

1. Rorschach test: inkblots are used, ambiguous forms are shown and person is asked to comment what he/she is seeing in the picture. ( 3 year - adult )
2. Thematic Apperception Test (TAT) – (16 year - adult): Pictures are used, subject is asked to make a story, what is happening in the picture, what happened before picture what will happen after picture. Rorschach and TAT are the true Projective tests, because in these there is Projection of One's own feelings in the Ambiguous forms and pictures.
3. Sentence completion test
4. Word association technique: quick response to words
5. Draw-a-person test

### III . Tests for organicity

1. Bender Gestalt test (5 year – adult): Test of visuomotor coordination, involves copying of figures, Used for screening for organic disorders
2. Benton Visual Retention Test: tests short-term memory, subject is shown a figure and then asked to draw from memory.
3. Halstead- Reitan Neuropsychological battery (9 – 14 years)
4. Luria - Nubrasca Neuropsychological battery.
5. PGI/NIMHANS /AIIMS Battery for **organicity**

### IV. Test for intelligence

- a. Wechsler Intelligence Scale for children (Verbal and performance scale (6 - 16 years – adult)

It has two components = Verbal, Performance — for finding mental age. Information (general knowledge), comprehension (proverbs), arithmetic (calculations), similarities (abstract), digit span (immediate memory), vocabulary (definitions) PERFORMANCE TESTS: Picture completion, picture arrangement, block design, object assembly, digit symbol

- a. Wechsler Adult Intelligence Test (WAIS) – (16 years—adult)
- b. Bhatia's Battery Indian adaptation of Weschler's scale.
- c. Stanford – Binet test 2 – 23 years.
- d. VSMS – Vineland's social Maturity Scale for children below 6 years of age.

## Organic Mental Disorders

- Dementia
- Delirium
- Amnesic syndrome

### DELIRIUM – Acute confusional State

#### Clinical features

1. Clouding of consciousness : May be from disorientation to dullness of alertness to deep coma
2. Disorientation: Memory disturbance. All aspects of memory registration, retention and recall are affected. One of the earliest manifestations is disorientation in time and place, resulting from an inability to register the sequence of events and to learn new surroundings.
3. Perceptual abnormalities – Visual Hallucinations (Frightening, Fragmentary, Lilliputian), illusions. Objects may be seen as larger (macropsia) or smaller (micropsia) than they are. They maybe perceived as distorted in shape or be misinterpreted (illusions). Hallucinations are the most striking perceptual disturbance. Generalized organic reactions are characteristically associated with visual and tactile perceptual disturbances. Focal lesions in the temporal lobe can cause disturbances in taste and smell.
4. Disturbance of sleep or reversal of sleep wake cycle
5. Psychomotor changes. Mental and motor activity is usually retarded. There is little spontaneity, speech is sparse and responses to questions are slow in forthcoming. However in some cases the reverse is true.
6. Thinking delusions are Transient and frightening. But the hall mark of delirium is transient delusion. There is subjective difficulty in thinking clearly. Speed of thought is slowed, mental fatigue soon occurs and the pattern of thinking becomes muddled. The patient has difficulty grasping the essential features of his environment so that events are misinterpreted and secondary delusional ideas develop, often of paranoid nature.
7. Emotional changes. Anxiety, irritability and depression may accompany the other features. In severe case the emotional response becomes apathetic.
8. Sundowning Q, phenomenon ie. worsening of symptoms after 'sunset'.
9. EEG – generalized slowing of activity.

### Causes of Acute Confusional States

#### A. Intra-cranial

1. Trauma
2. Vascular
  - i) TIA
  - ii) Cerebral haemorrhage
  - iii) Cerebral thrombosis
  - iv) SAH
  - v) Subdural haemorrhage
3. Epilepsy  
Post-**ictal** state
4. Infection
  - i) Encephalitis
  - ii) Cerebral abscess
  - iii) Meningitis
  - iv) AIDS
5. Tumour: Primary or secondary lesion

#### B. Extra -cranial

1. Infection
  - i) Exanthemata
  - ii) Septicaemia
  - iii) Pneumonia
  - iv) Urinary infection
2. Toxic
  - I. Alcohol
  - II. ii. Many therapeutic drugs (e.g. anticholinergics, beta-blockers, L-Dopa, isoniazid)

- 3. Endocrine
  - i) Hyperthyroidism
  - ii) Hypothyroidism
  - iii) Hypoglycemia
  - iv) Addisonian crisis
  - v) Hypopituitarism
- 4. Metabolic
  - i) Uraemia
  - ii) Liver failure
  - iii) Remote effects of carcinoma
  - iv) Electrolyte imbalance
  - v) Porphyria
- 5. Hypoxia
  - i) Respiratory failure
  - ii) Cardiac failure
  - iii) Acute heart block
  - iv) Carbon monoxide poisoning

**MANAGEMENT**

Once the cause is established specific treatment is given for the underlying lesion. I / V therapy may be required to correct fluid and electrolyte imbalance. Sedative drugs should not be given unless the patient's behaviour is disruptive; chlorpromazine or haloperidol are the drugs of choice except in delirium tremens when benzodiazepines (e.g. diazepam) are preferred.

**Amnestic Syndrome**

Clinical features: -

Memory impairment (esp recent memory) in absence of other significant cognitive Impairment.

Types: - Important ones are

1. 1. Thiamine deficiency (Korsakoff syndrome )
2. 2. Brain condition eg. Head injury, transient global amnesia, ECT etc. it is of Predominantly

Two Types - Anterograde: Loss of memory after the event and Retrograde : Loss of memory of period before the Event.

**Comparison Between Delirium & Dementia:**

Comparison Between Delirium & Dementia

Features	Delirium	Dementia
1. Onset	Usually acute	Usually insidious
2. Course	usually recover in 1 week may take upto 1 month	Usually protracted Although may be reversible
3. Clinical features		
i. Consciousness	Clouded	usually normal
ii. Orientation	grossly disturbed Disturbed only in late stages	usually normal
iii. Memory	Immediate retention and recall disturbed recent memory disturbed Remote memory disturbed only in late stages	Immediate retention and recall normal Recent memory disturbed
iv. Comprehension	Impaired	Impaired only in late stages
v. Sleep wake cycle	usually reversal of sleep wake cycle grossly disturbed	Usually normal
vi. Attention and concentration	grossly disturbed	Usually normal
vii. Diurnal variation	Marked sundowning present	Usually absent
viii. Perception	Visual illusion and hallucinations very common	Hallucinations may occur
ix. Other features	Asterixis, Multifocal myoclonus	catastrophic reaction perseveration

**DEMENTIA**

Characterized by multiple cognitive deficits which include impairment in memory with out impairment in consciousness. In this memory loss is along with the loss of Intelligence, loss of Personality and loss of the learned activities. The Screening Instrument of Dementia is MMSE( Mini-Mental status examination ) , The Normal score is 30 and any score <24 , is dementia. The various causes of dementia are:

**CAUSES:**

1. NEUROLOGICAL DISORDERS: Alzheimer Dementia – most common type Parkinson’s disease, Pick’s disease, Huntington’s chorea, Progressive supranuclear Palsy( steel Richardson syndrome), Lewy body
2. VASCULAR: multi-infarct
3. DRUGS: Alcohol, CO
4. VITAMIN deficiency: B1, B12, Niacin
5. METABOLIC: Uraemia, dialysis, wilson’s
6. ENDOCRINE: Hypothyroidism, cushing’s, Hypo-and hyperparathyroidism, Addison
7. INFECTIONS: AIDS, Creutzfeldt Jacob disease, Herpes simplex
8. TRAUMA: subdural hematoma
9. TUMOURS
10. OTHERS: Normal Pressure hydrocephalous

**REVERSIBLE DEMENTIAS:** Hypothyroid (Most common cause in India), normal pressure hydrocephalus, vitamin deficiency, brain tumours, Toxin (Most common cause in developed countries)

**Cortical And Subcortical Dementia**

**Features Cortical Dementia Subcortical Dementia**

**CORTICAL AND SUBCORTICAL DEMENTIA**

Features	Cortical Dementia	Subcortical Dementia
1. Site of lesion	Cortex (Frontal and temporo-parieto occipital association areas, and hippocampus)	Subcortical grey matter (Thalamus, basal ganglia, and rostral brain stem)
2. Examples	Aizheimer’s disease Pick’s disease	Huntigton chorea, HIV – Related dementia Parkinson’s disease, Progressive supranuclear, palsy, Wilson’s disease
3. Severity	Severe	Mild to moderate
4. Motor system	usually normal	Dysarthria, lexed/extended posture, tremors, dystonia, chorea, ataxia, rigidity
5. Other features	Simple delusions; Depression uncommon Severe aphasia amnesia agnosia, apraxia, acalculia; slowed cognitive speed (bradyphrenia)	Complex delusions; Depression common; Rarely mania
6. Memory deficit (short term	Recall helped very little by cues	Recall partially helped by Cues and recongnition tasks

Disease	Initial Symptom	Mental Status	Neuropsychiatry	Neurology	Imaging
AD	Memory loss	Episodic memory	Initially normal	Initially normal	Entorhinal and hippocampal atrophy
Vascular	Often sudden; variable initial symptoms; apathy, falls, focal weakness	Frontal/executive cognitive slowing/ can spare memory	Apathy, delusions, anxiety	Usually motor slowing, spasticity/ can be normal	Cortical and/or subcortical infarctions
FTD	Apathy/ reduced judgment/ insight/speech/ language hyperorality	Frontal/executive, language; spares drawing	Apathy, disinhibition, hyper orality, euphoria, depression	Vertical gaze palsy, axial rigidity, dystonia, alien hand(due to PSP/CBD overlap)	confluent white matter disease Frontal and/or temporal atrophy; spares posterior parietal lobe
DLB	Visual hallucinations, REM-sleep disorder delirium, Capgras syndrom, parkinsonism	Drawing and frontal/ executive; spares memory; delirium prone	Visual hallucinations, depression, sleep disorder, delusions	Parkinsonism	Posterior parietal; hippocampi larger than in AD
Prion	Dementia, mood Changes, anxiety, movement disorder	Variable, frontal/ executive, focal cortical, memory	Depression, anxiety	Myoclonus, rigidity, parkinsonism	Coricla ribboning and basal ganglia hyperintensities on diffusion/flare MRI

**Clinical Differentiation of the Major Dementias**

**ALZHEIMER DEMENTIA**

**Clinical features:**

1. Memory impairment esp. recent memory or learning of new information.
2. Impairment in judgment and thinking
3. Aphasia (language disturbance)
4. Gene responsible
  - a. APO E4 gene on chromosome. no. 19
  - b. Presenilin-1 gene on Chromosome 14
  - c. Presenilin-2 Gene on chromosome 1
  - d. Chromosome No. 21 / as a whole
5. Apraxia (impaired ability to carry out motor activities despite intact motor functions)
6. Disturbance in executive functions, Personality decline
7. ± Psychotic features (suspiciousness, hallucinations).
8. MMSE score =23 (impairment), <20 (definite impairment).
9. Agnosia (failure to identify object despite intact sensory functions) is , a feature of Cortical dementia, not seen in Alzheimer’s disease



**PATHOLOGY:-**

1. Senile-plaques, amyloid deposits(Extracellular deposits)
2. Neuro-fibrillary tangles,( **intracellular deposits , And are pathognomonic Of alz. Disease and have prognostic implications.**)
3. Neuronal loss (particularly in cortex and hippocampus\*)
4. Neurochemically - decrease brain choline acetyltransferase with decrease brain Ach. (esp. in nucleus basalis of Meynert).
5. CT – diffuse atrophy, flattened sulci & enlarged cerebral ventricle. Hippocampus is specifically implicated for memory storage parieto-occipital involvement

**Treatment:**

The cerebroactive drugs may be grouped into:

**A. Cholinergic- activators :**

Tacrine, Rivastigmine, Donepezil, Galantamine

**B. Glutamate (NMDA) antagonist : Memantine**

**A. Cholinergic activators** Since brain Ach levels are markedly reduced and cholinergic neurotransmission is the major sufferer in AD, various approaches to augment brain Ach have been tried.

1. Tacrine It is the first centrally acting anti-ChE to be introduced for AD. In clinical trials tacrine produced significant improvement in memory, attention, praxis, reason and language. However, it does not alter course of the underlying disease process. Frequent side effects and hepatotoxicity have restricted its use and currently no more used.
2. Rivastigmine This carbamate derivative of physostigmine inhibits both AChE and BuChE but is more selective for the G1 isoform of AChE that predominates in certain areas of the brain. Rivastigmine is highly lipid-soluble-enters brain easily. Greater augmentation of cholinergic transmission in brain is obtained with mild peripheral effect.
3. Donepezil This cerebroselective and reversible anti-AChE produces measurable improvement in several cognitive as well as non-cognitive (activities of daily living) scores in AD, which is maintained at least upto 2 years. The benefit is ascribed to elevation of Ach level in the cortex, especially in the surviving neurones that project from basal forebrain to cerebral cortex and hippocampus.
4. Galantamine It is a natural alkaloid which selectively inhibits cerebral AChE and has some direct agonistic action on nicotinic receptors as well. Galantamine has produced cognitive and behavioural benefits in AD which are comparable to rivastigmine and donepezil.

**B. Glutamate (NMDA) antagonist:**

1. Memantine This new NMDA receptor antagonist, related to amantadine (also a NMDA antagonist), has been found to slow the functional decline in moderate-to-severe AD, but benefit in milder disease are unclear. It appears to block excitotoxicity of the transmitter glutamate in a noncompetitive and usedependent manner.

**Vascular dementia or Multi-infarct dementia**

- CF same as above +
- Clinical evidence of focal brain damage. Eg. U/L spastic weakness of limb, U/L tendon reflexes,
- **Sudden onset and Step-ladder pattern of dementia**
- Extensor plantar, Pseudobulbar palsy
- Evidence of significant cerebro-vascular disease.

# Binswanger's disease – subcortical arteriosclerotic encephalopathy

**Lewy body dementia** Extreme sensitivity to neuroleptics

- i) CF as of Alz dem +
- ii) Visual Hallucinations
- iii) Parkinsonian features
- iv) Extra pyramidal signs
- v) Repeated falls
- vi) Syncope
- vii) Sensitive to neuroleptics

**Pick's disease**

Clinical Feature: as of Alzheimer's dementia, chromosome involved is 21q Predominance of frontal and temporal lobe involvement ie. Disinhibition / emotional blunting Kliver-bucy syndrome: hypersexuality, hyperorality, placidity

**Normal pressure hydrocephalus**

Triad of dementia, ataxia & urinary incontinence

**Creutzfeldt jakob disease ( Prion - Disease)**

Infective , prion disease, Very rapid progression

Neurological symptoms – Pyramidal, extra pyramidal , cerebeller , aphasia , visual impairment Myoclonic seizures

Diffuse slow waves in EEG: triphasic EEG, Death within 2 years

DEMENTIA VS. PSEUDODEMENTIA

**DEMENTIA VS. PSEUDODEMENTIA**

<b>Dementia</b>	<b>Pseudodementia (Depressive)</b>
1. Patient rarely com-plains of the cognitive Impairment	Patient usually always complains about the impairment
2. Patient emphasizes	Achievements Patient emphasizes disability
3. Patient appears unconcerned	Patient communicates distress
4. Usually labile affect	Severe depression
5. Patient makes mis takes on examination	'Don't know' answers are frequent
6. Recent memory impairment found on examination	Recent memory rarely found on examination
7. Confabulation may be Present	Confabulation very rare
8. Consistently poor performance on similar tests	Marked variability in performance on similar tests
9. History of depression	Past history of manic/ depressive episodes may be present uncommon

Most common cause of pseudodentia is Depression

## MULTIPLE CHOICE QUESTIONS

1. Organic Mental Disease is indicated by
  - a. Incoherence
  - b. Visual hallucinations
  - c. Flight of idea
  - d. Preservation of speech
2. Cognitive disorders are
  - a. Intellectualization
  - b. Depersonalization
  - c. Dementia
  - d. Delirium
3. Disorientation occurs in
  - a. Schizophrenia
  - b. Organic Brain Syndrome
  - c. Depression
  - d. Mania
4. The presence of delusion, hallucination and disturbed cognitive functions indicate:
  - a. Paranoid Psychosis
  - b. OCD
  - c. Organic Brain Syndrome
  - d. Dissociative disorder
5. Cognitive disorders are
  - a. Intellectualization
  - b. Depersonalization
  - c. Dementia
  - d. Delirium
6. All are features of Delirium except
  - a. Confusion
  - b. Disorientation
  - c. Hyperactivity
  - d. Loss of memory
7. Illusion with altered sensorium is seen in
  - a. Schizophrenia
  - b. Hysteria
  - c. MDP
  - d. Delirium
8. A patient with pneumonia for 5 days is admitted to the hospital in altered sensorium. He suddenly ceases to recognize the doctor and staff. He thinks that he is in jail and complains of scorpion attacking him. His probable diagnosis is
  - a. Acute Dementia
  - b. Acute delirium
  - c. Acute schizophrenia
  - d. Acute paronia
9. An alcoholic is brought to the Emergency OPD with the complaint of irrelevant talking. He had stopped using alcohol three days back. On examination, he is found to be disoriented to time, place and person. He also has visual illusions and hallucinations. There is no history of head injury. Most likely diagnosis is:
  - a. Dementia praecox
  - b. Delirium tremens
  - c. Schizophrenia
  - d. Korsakoff's psychosis
10. Delirium tremens is characterized by confusion associated with:
  - a. Autonomic hyperactivity and tremors
  - b. Features of intoxication due to alcohol
  - c. Sixth nerve palsy
  - d. Korsakoff psychosis
11. Slow waves in EEG activity seen in:
  - a. Depression
  - b. Delirium
  - c. Schizophrenia
  - d. Mania
12. All are true about Delirium tremens Except
  - a. Severe depression
  - b. Hallucination
  - c. Extreme anxiety
  - d. Delusion
13. Not a feature of dementia is
  - a. Loss of sensorium
  - b. Wearing of dirty clothes
  - c. Forgetfulness
  - d. Loss of neurons in brain
14. Korsakoff's Psychosis is diagnosed by
  - a. Peripheral neuropathy
  - b. Visual hallucination
  - c. Impairment of short term memory
  - d. Seizures
15. All are the features of Korsakoff's syndrome except:
  - a. Confabulation
  - b. Retrograde amnesia
  - c. Antegrade amnesia
  - d. Defective motor skill
16. All are relatively normal in Korsakoff's psychosis except:
  - a. Implicit memory
  - b. Intelligence
  - c. Language
  - d. Learning
17. Korsakoff's syndrome true
  - a. Cerebral Cortex is mostly affected
  - b. Learning is relatively normal
  - c. Retrograde memory is not affected
  - d. Confabulation may be present
18. Patient presented with short lasting episodic behavioural & dream like state with thrashing movements of his limbs. He does not recall of these episode & no precipitating factor is likely. The most likely diagnosis is a
  - a. Schizophrenia
  - b. Temporal lobe epilepsy
  - c. Panic episodes
  - d. Dissociative disorder

19. True about dementia is A/E
  - a. Often irreversible
  - b. Hallucination are not common
  - c. Clouding of consciousness is common
  - d. Nootropics have limited role
20. Biological Amnesia is
  - a. Lack of interest
  - b. Presenile dementia
  - c. Opioid addiction
  - d. Hypothyroidism
21. Characteristic features of subcortical dementia is
  - a. Memory loss
  - b. Aphasia
  - c. Dyslexia
  - d. Tactile agnosia
22. All are example of cortical dementia except.
  - a. Alzheimer's disease
  - b. Multiple sclerosis
  - c. Creutzfeldt Jacob disease
  - d. Pick's disease
23. Reversible cause of dementia is
  - a. Multi infarct
  - b. Senile Dementia
  - c. Post Encephalitis
  - d. Huntington's chorea
24. Reversible cause of dementia
  - a. Hypothyroidism
  - b. Alzheimer's disease
  - c. Vitamin B12 deficiency
  - d. Vitamin A deficiency
25. The following are the psychiatric sequelae after stroke in elderly.
  - a. Depression
  - b. Post traumatic stress disorder
  - c. Dementia
26. Vascular dementia is characterised by
  - a. Disorientation
  - b. Memory deficient
  - c. Emotional liability
  - d. Visual hallucination
  - e. Personality deterioration
27. Treatable causes of dementia are:
  - a. Alzheimer's ds.
  - b. Hypothyroidism
  - c. Multi-infarct dementia
  - d. SDH
  - e. Hydrocephalus
28. A 65 years old male is brought to the outpatients clinic with one year illness characterized by marked forgetfulness, visual hallucinations, suspiciousness, personality decline, poor self care and progressive deterioration in his condition. His Mini Mental Status Examination (MMSE) score is 10. His most likely diagnosis is:
  - a. Dementia
  - b. Schizophrenia
  - c. Mania
  - d. Depression
29. Dementia of Alzheimer's type is not associated with one of the following:
  - a. Depressive symptoms
  - b. Delusions
  - c. Apraxia and aphasia
  - d. Cerebral infarcts
30. A 70 yr. old man presents with h/o prosopagnosia loss of memory, 3rd person hallucination since 1 month. On examination deep Tendon reflexes are increased, mini mental examination score is <20; diagnosis is:
  - a. Dissociated Dementia
  - b. Schizophrenia
  - c. Alzheimer's disease
  - d. Psychotic disorder
31. Biochemical etiology of Alzheimer's disease relates to
  - a. Serotonin
  - b. Dopamine
  - c. Acetyl choline
  - d. GABA
32. Neurofibrillary tangles with senile plaques are seen in:
  - a. Parkinson's disease
  - b. Alzheimer's disease
  - c. Schizophrenia
  - d. Tuberos sclerosis
33. Rivastigmine and Donepezil are drugs used predominantly in the management of:
  - a. Depression
  - b. Dissociation
  - c. Delusion
  - d. Dementia

**Answer Key**

1. B
2. C,D
3. B
4. C
5. CD
6. D
7. D
8. B
9. B
10. A
11. B
12. A
13. A
14. C
15. D
16. D
17. D
18. B
19. C
20. B
21. A
22. B
23. C
24. A,C
25. A,C
26. A,B,C
27. B,D
28. A
29. D
30. C
31. C
32. B
33. D

**Psychoactive Substance Use Disorders**

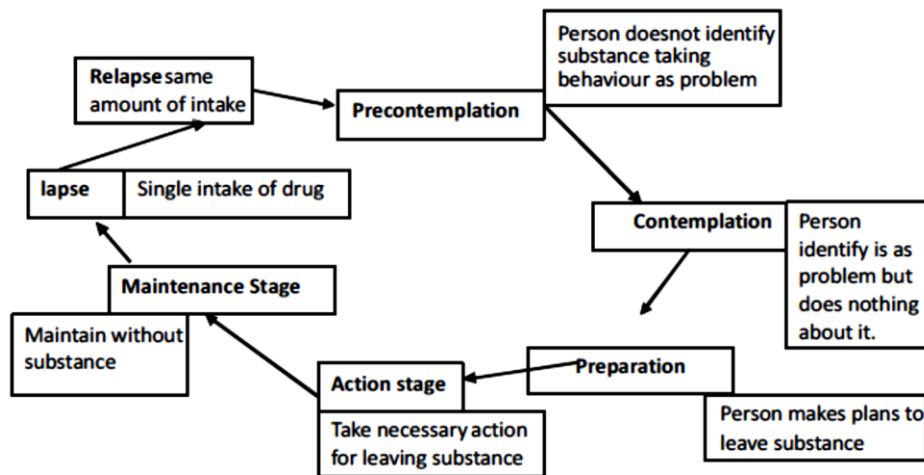
A Psychoactive drug is one that is capable of altering the mental functioning. There are four patterns of substance use, which may overlap with each other Pattern of use

1. Substance use - Any use of substance with out any problem.
2. Intoxication
3. Harmful use or abuse When it is associated with
  - Legal, Social, physical & Psychological problems
4. Dependence - Characterised by
  - a. Tolerance - Increasing amount is used for same pleasure.
  - b. Withdrawal -
  - c. Craving - Strong desire to take the substance
  - d. Prioritization - Neglect of alternate pleasurable activities
  - e. Taking despite harm - Persistence with the substance despite overtly harmful consequences
  - f. Compulsion - Difficulty in controlling substance taking behavior

Any 3 out of 6, if present for one year, is called as Dependence.

N.B. Reverse Tolerance : Reverse tolerance or sensitization is the phenomenon of a reversal of the side-effects from a drug, the reduction of insensitivity caused after drug tolerance has been established, or, in some cases, an increase in specific effects of a single drug existing alongside a tolerance to other effects of the same substance. As in alcoholics, when the patients Liver is damaged, then even with the low doses the patient would experience the same effect with even with small amount of Alcohol.

Motivation cycle: Given by Prochaska and Diclemente .



The CBT or motivation enhancement therapy is not required once the person reaches action stage of motivation.

I. Alcohol - Alcohol is a CNS suppressant.  
 Effect of Blood Alcohol Level in the Absence of Tolerance

Blood Level, mg/dl	Usual Effect
20	Decreased inhibitions, a slight feeling of intoxication
80	Decrease in complex cognitive functions and Motor performance
200	Obvious slurred speech, motor incoordination irritability, and poor judgement
300	Light coma and depressed vital signs
400	Death

Types of alcoholism:

- Alfa: excessive intake, no loss of control
- Beta: Physical complications, no dependence
- Gamma: physical and psychological dependence, Most severe
- Delta: Loss of control, amount can be controlled
- Epsilon: Dipsomania, spree drinking

Physical Effects of Chronic Alcoholism

SYSTEM	CONSEQUENCES
1. Cardiovascular	Cardiomyopathy, Hypertension
2. Gastro-intestinal	Oro-pharyngeal cancer, Oesophageal cancer, Gastritis, Mallory-Weiss syndrome, Pancreatitis, Malabsorption
3. Liver	Fatty change, Acute hepatitis, liver cancer
4. Neurological	Cerebral haemorrhage, Peripheral neuropathy, Dementia Wernicke-Korsakoff syndrome, Cerebellar degeneration
5. Musculo-skeletal	Myopathy, Gout
6. Respiratory	Pneumonia, Tuberculosis
7. Endocrine and Reproductive	Hypoglycaemia Hypogonadism, Pseudo-Cushing's syndrome, Infertility Foetal alcohol syndrome
8. Skin	Spider naevi, Palmar erythema, Acne rosacea

Intoxication: - Transient condition following use of substance.

Clinically significant maladaptive behavior eg inappropriate sexual or aggressive behavior, mood lability, impaired judgement etc.

Sign :- slurred speech, in coordination, unsteady gait, nystagmus, impairment in attention or memory & stupor or coma.

Treatment:- Symptomatic and supportive

**CAGE QUESTIONNAIRE** – For testing alcohol dependence

The CAGE questionnaire basically consists of four questions:

- I. Have you ever had to Cut down on alcohol (amount).
- II. ii. Have you ever been Annoyed by people's criticism of alcoholism.
- III. iii. Have you ever felt Guilty about drinking
- IV. iv. Have you ever needed an Eye opener drink (early morning drink)

A score of 2 or more identifies problem drinkers.

Alcohol withdrawal syndrome:

1. Tremors (Morning shakes): within 6 hours
2. Rum fits: multiple GTCS; within 12-36 hours
3. Alcoholic hallucinosis: auditory hallucinations; within 12-24 hrs
4. Delirium tremens à Called as delirium tremens because there is a Delirium + Tremors +

Autonomic hyperactivity.

- a. Clouding of consciousness with disorientation.
- b. Poor attention span and distractibility.
- c. Visual (and also auditory) hallucinations and illusions, which are often vivid and frightening. Tactile hallucinations of insects crawling over body may occur.
- d. Marked autonomic disturbance with tachycardia, fever sweating hypertension and pupillary dilatation.
- e. Psychomotor agitation and ataxia.
- f. Insomnia, with a reversal of sleep -wake pattern
- g. Dehydration with electrolyte imbalance.

In alcoholic paranoia there are certain features to be differentiated from schizophrenia.

<b>Alcohol induced psychotic disorder or alcoholic hallucinosis</b>	<b>Schizophrenia</b>
<ol style="list-style-type: none"> <li>1. Usually commences as illusion. Progressing to elementary hallucin to well formed hallucination</li> <li>2. Can recognise the owner of the voice</li> <li>3. Adress the patient directly usually derogatory or commanding type</li> <li>4. Insight regained as soon as hallucination stop</li> <li>5. No or minimal                             <ul style="list-style-type: none"> <li>- Thought disorder</li> <li>- Affective inappropriates or bhuting</li> <li>- Disorganization</li> <li>- Catatonic feature</li> </ul> </li> <li>6. Delusion are secondary</li> <li>7. Usually occurs at a time when patient is reducing his alcohol intake</li> <li>8. Rapid response to anti psychotics / 6 month</li> <li>9. Remits within max. 6 months of abstinence</li> </ol>	<ol style="list-style-type: none"> <li>1. Hallucinations from beginning</li> <li>2. Doesnot necessarily recognize the owner of the voice.</li> <li>3. 3rd person auditory hallucination</li> <li>4. No insight</li> <li>5. Presence                             <p style="text-align: center;">Primary or secondary</p> </li> <li>7. Reduction or inreased alcohol consumption both may exacerbate the illness</li> <li>8. Slow</li> <li>9. Follow own course.</li> </ol>

Treatment of alcohol induced psychotic disorder is antipsychotics only , however the dose need is less and for shorter duration of time – 4 to 6weeks only.

CNS Complications due to alcohol:

1. Wernicke’s encephalopathy
2. Korsakoff ’s syndrome
3. Marchiafava-Bignami disease: degeneration of corpus callosum
4. Dementia
5. Cerebellar degeneration
6. Central pontine myelinosis

### **Korsakoff Syndrome**

In psychiatry the most significant disorder is the amnestic syndrome caused by thiamine deficiency. When this has an abrupt onset the patient becomes acutely confused; mental state examination reveals drowsiness, disorientation in time and place and an impaired ability to recall recent events or to register new information.



Physical examination reveals a horizontal nystagmus, evidence of external ocular palsies, ataxia and peripheral neuropathy. This syndrome, known as Wernicke’s encephalopathy, results from damage to the mammillary bodies, dorso-medial nuclei of the thalamus and adjacent areas of grey matter. Wernicke’s encephalopathy is due to poor nutrition associated with chronic alcoholism; other causes are prolonged vomiting, diarrhoea and severe starvation. Pathology – Site – B/L dorsomedial nuclei of thalamus and mammillary body, hypertrophy of astrocytes. Immediate treatment with thiamine 50 mg I/v is essential to minimise permanent damage. When recovery is incomplete a chronic amnesic syndrome develops; this being known as Korsakoffs psychosis. Characteristically the patient is fully conscious but has a profound impairment of recent memory recall and new learning ability. A striking feature is a tendency to confabulate which has been defined as a falsification of memory in clear consciousness.

For example if the patient is asked to describe his activities during the previous week he will reply by reporting events which have taken place many years previously. Confabulation probably results from an inability to distinguish the temporal sequence of past events. Amnesia also occurs in bilateral lesions of the hippocampus and hippocampal gyrus which are situated on the in feromedial aspect of the temporal lobe. The conditions chiefly responsible are herpes simplex encephalitis and CVA localised to the posterior cerebral arteries. The clinical picture is similar to that of Korsakoff ’s psychosis except that confabulation does not occur. Other deficits associated with focal brain lesions include expressive and receptive aphasias, apraxias and agnosias

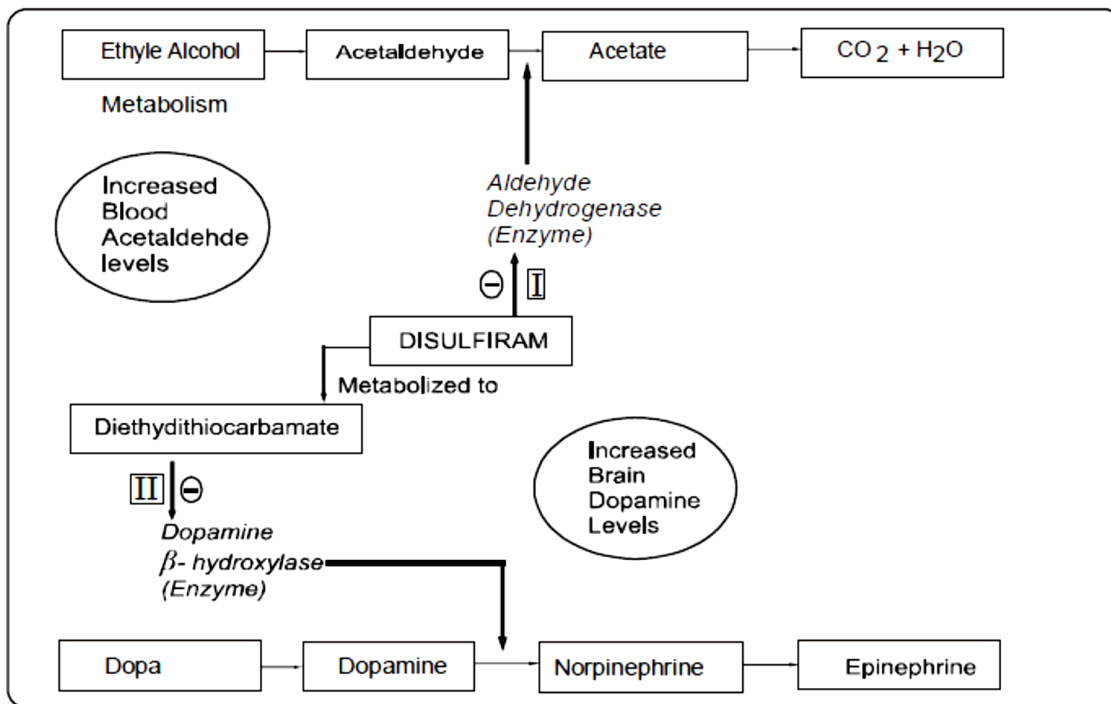
Alcohol dependence T/t—

(1) Detoxification is done by - Benzodiazepine esp. longer acting Benzodiazepines, like chlordiazepoxide, other Benzodiazepine like Diazepam, Lorazepam, Alprazolam can also be used.

Relapse prevention

(I) Aversion treatment – Disulfiram

(II) Anti-Craving agent like – Naltrexone, Acamprosate, Fluoxetine, Topiramate & Baclofen.



\* ..... Partial Blocker  
 \_\_\_\_\_ Predominant Blocker  
**Fig: Disulfiram: Mode of Action**

**Pharmacologic Actions**

Disulfiram is almost completely absorbed from the gastrointestinal (GI) tract after oral administration. Its half-life is estimated to be 60 to 120 hours. Therefore, 1 or 2 weeks may be needed before disulfiram is totally eliminated from the body after the last dose has been taken. The metabolism of ethanol proceeds through oxidation via alcohol dehydrogenase to the formation of acetaldehyde, which is further metabolized to acetyl-coenzyme A (acetyl-CoA) by aldehyde dehydrogenase. Disulfiram is a predominantly aldehyde dehydrogenase inhibitor that interferes with the metabolism of alcohol by producing a marked increase in blood acetaldehyde concentration. The accumulation of acetaldehyde (to a level up to ten times higher than occurs in the normal metabolism of alcohol) produces a wide array of unpleasant reactions, called the disulfiram ethanol reaction (DER), characterized by nausea, throbbing headache, vomiting, hypertension, flushing, sweating, thirst, dyspnea, tachycardia, chest pain, vertigo, and blurred vision. The reaction occurs almost immediately after the ingestion of one alcoholic drink and can last from 30 minutes to 2 hours.

(II) Anti craving Agent—Naltrexone, Acamprosate, Fluoxetine, Topiramate & Baclofen.

**Acamprosate**

Acamprosate's mechanism of action is not fully understood, but it is thought to antagonize neuronal overactivity related to the actions of the excitatory neurotransmitter glutamate. In part, this may result from antagonism of N-methyl-D-aspartate (NMDA) receptors.

**INDICATIONS**

Acamprosate is used for treating alcohol-dependent individuals seeking to continue to remain alcohol-free after they have stopped drinking. Its efficacy in promoting abstinence has not been demonstrated in persons who have not undergone detoxification and who have not achieved alcohol abstinence before beginning treatment.

**Baclofen**

Baclofen is used for the treatment of spastic movement, especially in instances of cord injury, spastic diplegia, multiple sclerosis, amyotrophic lateral sclerosis (Lou Gehrig's Disease) and trigeminal and glossopharyngeal neuralgias. Baclofen has also been shown to be as effective as diazepam in uncomplicated alcohol withdrawal syndrome. It was effective in promoting alcohol abstinence in patients with severe liver cirrhosis.

**Mechanism of action**

Baclofen produces its effect via modulating the GABAB receptor, similar to the drug GHB which also has the same mechanism of action and also similar effects. However, there are some pharmacological differences in that baclofen appears to have reduced abuse and dependence potential. The modulation of the GABA receptor is what produces baclofen's range of therapeutic properties.

**Topiramate****MECHANISM OF ACTION**

Electrophysiological and biochemical evidence suggests that topiramate, at pharmacologically relevant concentrations, blocks voltage-dependent sodium channels, augments the activity of the neurotransmitter gamma-aminobutyrate at some subtypes of the GABAA receptor, antagonizes the AMPA/kainate subtype of the glutamate receptor, and inhibits the carbonic anhydrase enzyme, particularly isozymes II and IV. It is used as an anti-epileptic drug, migraine prophylaxis and anti-craving drug for alcohol.

**OPIOID USE DISORDERS**

1. Smack: street form of heroin, Brown Sugar, Morphine, opioid, Doda, Afeem.

**Intoxication:**

Recent use of an opioid

Clinically significant maladaptive behavioral changes eg initial euphoria followed by apathy, dysphoria, psychomotor agitation or retardation, impaired judgment, or impaired functioning

Action of Opioid Receptors:

Receptor Type	Actions
Mu (e.g., morphine)	Analgesia, reinforcement euphoria, cough and appetite suppression, decreased respiration, decreased GI motility, sedation, hormone changes, dopamine and acetylcholine release
Kappa (k) (e.g., butorphanol)	Decreased dysphoria, decreased GI motility, decreased, psychotic symptoms, sedation, diuresis, analgesia
Delta (e.g., etorphine)	Hormone changes, appetite, suppression, dopamine release

### OPIOID DERIVATIVES

#### A. Natural Alkaloids of Opium

1. Morphine
2. Codeine
3. Thebaine
4. Noscapine
5. Papaverine

#### B. Synthetic Compounds

1. Heroin
2. Nalorphine
3. Hydromorphone
4. Methadone
5. Dextropropoxyphene
6. Meperidine (Pethidine)
7. Cyclazocine
8. Levallorphan
9. Diphenoxylate

Signs: - Pupillary constriction, drowsiness or coma, slurred speech & impairment in attention or memory.

Treatment:- Naloxone & supportive care

**WITHDRAWAL:** Due to cessation of (or reduction in) opioid use or administration of an opioid antagonist after a period of opioid use Withdrawal are features: Dysphoric mood, Nausea or vomiting, Muscle aches, Lacrimation or rhinorrhea, Pupillary dilatation, Piloerection (goose flesh, cold turkey), or Sweating, Diarrhea, Fever, Insomnia, Yawning.

#### Treatment:

Opioid detoxification done in following manner

#### I) No drugs (Therapeutic Community)

- The patient are closed in a setting no drugs are given and was given responsibility like cleaning, shopping, cooking etc. The person experiences the withdrawal. ( The person has erect hairs (piloerection) giving appearance of spinous animal "Cold turkey" so it is also called as "cold turkey" method of treatment.

#### II) Symptomatic drugs give drugs according to withdrawal symptoms.

- for ache & pain - NSAIDS
- for Diarrhoea - Loparamide
- for Insomnia - Benzodiazepines
- for Other - Clonidine to Decrease sympathetic overactivity.

#### III) Substitution drugs - substitute the opioid with other long acting opioids like.

- a. Proxyvon - Dextro propoxy phene
- b. Methadone
- c. Buprenorphine.

**Relapse prevention** - done with opioid antagonist.

Naltrexone - Naltrexone is chosen because of the longer half life  $t_{1/2}$ .

Naloxone is used in overdose or toxicity of opioid

**Maintenance treatment** done for people for whom drug free lifestyle is not possible.

In America and worldwide done with methadone maintenance clinics.

In India Buprenorphine Maintenance clinic called as OST - oral substitution treatment

**2. Cannabis (Marijuana, DOPE) use disorder**

- Active principle—9 THC (Tetrahydrocannabinol)
- Common names— charas, ganja, bhang, hashish, grass, marijuana
- Amotivational syndrome—associated with long term and heavy use
- Characterized by apathy, anergia & unwillingness to persist in a task

Physical dependence not seen with cannabis & LSD

Hemp insanity: psychosis due to cannabis

Flashbacks: recurrence of experience, Occurs due to high fat solubility of compound it get stored in fat vesicle when that fat vesicle got metabolized releasing cannabis – flashbacks occurs.

**3. COCAINE**

It is a CNS stimulant. It is a reuptake blocker of all the amines and Thus increase the Levels of All amines namely dopamine, serotonin , and Noradrenaline. In this Formication (tactile Hallucinations/ Cocaine Bugs ) and psychosis occurs . Psychosis happens in the Intoxication state. Derived from Erythroxylum CoCa

**TABLE: PHASES IN COCAINE WITHDRAWAL SYNDROME**

Phase	Substage	Duration	Clinical Features
I. (Crash phase)	i	9 hours to	Agitation, depression, anorexia, craving +++
	ii	4 days after	Fatigue, depression, sleepiness, craving +
	iii	discontinuation	Exhaustion, hypersomnia with intermittent awakening, hyperphagia, craving ±
II.	i	4 to 7 Days after	Normal sleep, improved mood, craving ±
	ii	discontinuation	Anxiety, anergia, anhedonia, craving ++
iii ( Extinction phase)		After 7-10 days of discontinuation	No withdrawal symptoms, increased vulnerability to relapse

Complications: psychosis,(MCQ) ( cocaine bugs, formication), nasal septum perforation (snuffing), Myocardial infarction Lysergic acid diethylamide ( acid), Psilocybin, mescaline

4. **HALLUCINOGENS:** lysergic acid (LSD) - Presnably produces its effects by an action on the 5-HT levels in Brain Comman pattern of LSD use is a trip (Occasional use followed by a long period of abstinence. no physical or psychological dependence, common in rave parties, sometimes acute LSD Intoxication presents with acute panic attack ( “ BAD TRIP ” ) flashbacks are common
5. **AMPHETAMINES** (Street) CNS stimulants, used by youngsters to increase academic performance Can cause psychosis similar to paranoid schizophrenia Ecstasy: MDMA methylenedioxy methamphtetamine, produces vivid hallucinations

**MULTIPLE CHOICE QUESTIONS**

1. Treatment is not required in withdrawal of
  - a. Cannabis
  - b. Alcohol
  - c. Amphetamine
  - d. LSD
2. Flash backs are seen with
  - a. LSD
  - b. Cocaine
  - c. Opiate
  - d. Amphetamine
3. Most common substance of abuse in India:
  - a. Cannabis
  - b. Tobacco
  - c. Alcohol
  - d. Opium
4. Symptomatic treatment is not required in withdrawal of
  - a. Cannabis
  - b. Morphine
  - c. Alcohol
  - d. Cocaine
5. Active substance in Hashish is
  - a. Morphine
  - b. LSD
  - c. Mescaline
  - d. Tetra-Hydrocannabinol
6. Physical withdrawal symptoms are absent in patients abusing
  - a. Alcohol
  - b. Cannabis
  - c. Opium
  - d. Pethidine
7. After use of some drug, a person develops episodes of rage in which he runs about and indiscriminately injures a person who is encountered in way. He is probably addict of
  - a. Alcohol
  - b. Cannabis
  - c. Opium
  - d. Cocaine
8. Physical dependence is not seen with
  - a. Alcohol
  - b. Raw opium
  - c. Cannabis
  - d. Benzodiazepines
9. Which of the following is not an opioid peptide?
  - a. -Endorphin
  - b. Epinephrin
  - c. Leu5-eukephalins
  - d. Met-enkephalins
10. Yawning is a common feature of
  - a. Alcohol withdrawal
  - b. Cocaine withdrawal
  - c. Cannabis withdrawal
  - d. Opioid withdrawal
11. The following are opioid withdrawal symptoms except:
  - a. Insomnia
  - b. Piloerection
  - c. Rhinorrhea
  - d. Constipation
12. Acute opioid withdrawal is characterized by all except :-
  - a. Rhinorrhoea
  - b. Piloerection
  - c. Insomnia
  - d. Constipation
13. The drug which is used for long term maintenance in opioid addiction:
  - a. Naloxone
  - b. Nalorphine
  - c. Butarphamol
  - d. Methadone
14. Naltrexone is used in opioid addiction because.
  - a. To treat withdrawal symptoms
  - b. To treat overdose of opioids
  - c. Prevent relapse
  - d. Has addiction potential
15. Naltraxone is used in a case of opioid dependence to:
  - a. Prevent respiratory depression
  - b. To treat withdrawal symptom
  - c. To prevent relapse
  - d. To treat overdose of opioid
16. Which of the following is an alternative to methadone for maintenance treatment of opiate dependence?
  - a. Diazepam
  - b. Chlordiazepoxide
  - c. Buprenorphine
  - d. Dextropropoxyphene
17. Opiate withdrawal is treated with
  - a. CPZ
  - b. Nalorphine
  - c. Pethidine
  - d. Methadone
18. In patients of substance-abuse, drugs used are all except :-
  - a. Naltrexone
  - b. Disulfiram
  - c. Clonidine
  - d. Lithium
19. All are adulterants of Heroin, except:
  - a. Chalk powder
  - b. Quinine
  - c. Charocoal
  - d. Fructose
20. Drugs used in Heroin withdrawal are A/E
  - a. Buprenorphine
  - b. Clonidine

- c. Dextropropoxyphene  
d. Haloperidol
21. Tactile Hallucinations are seen in:  
a. Alcohol  
b. Heroin  
c. Cocaine  
d. Phenargan
22. Feeling of creeping insects is seen in:  
a. Alcohol withdrawal  
b. Lead poisoning  
c. Schizophrenia  
d. Cocaine abuse
23. By which alcohol dependence is best indicated  
a. Black outs  
b. Early morning drinking  
c. Withdrawal symptoms  
d. Physical dependence
24. Psychiatric complications of alcohol dependence:  
a. Anxiety  
b. Suicide  
c. Depression  
d. Schizophrenia
25. Most common symptom of alcohol withdrawal is:  
a. Bodyache  
b. Tremor  
c. Diarrhoea  
d. Rhinorrhoea
26. Features of alcohol withdrawal are all except:  
a. Epileptic seizure  
b. Restlessness  
c. Hypersomnolence  
d. Hallucination
27. A alcoholic addicted presents in emergency with irrelevant talking & disoriented to time, place and person there is H/O not taking alcohol from last 3 days & no head injury. He also have visual hallucination. The diagnosis.  
a. Dementia praecox  
b. Delirium tremens  
c. Schizophrenia  
d. Korsakoff psychosis
28. A 40 year old male, with history of daily alcohol consumption for the last 7 years, is brought to the hospital emergency room with acute onset of seeing snakes all around him in the room, not recognizing family members, violent behavior and tremulousness for few hours. There is history of his having missed the alcohol drink since 2 days. Examination reveals increased blood pressure, tremors increased psychomotor activity, fearful affect, hallucinatory behaviour, disorientation, impaired judgement and insight. He is most likely to be suffering from:  
a. Alcoholic hallucinosis  
b. Delirium tremens  
c. Wernicke encephalopathy  
d. Korsakoff's psychosis
29. True about delirium tremens.  
a. Clouding of consciousness  
b. Chronic delirious behaviour  
c. Hallucination  
d. All of above
30. A 30 year old male with history of alcohol abuse for 15 years is brought to the hospital emergency with complaints of fearfulness, mis-recognition, talking to self, aggressive behaviour, tremulousness and seeing snakes and reptiles that are not visible to others around him. There is history of drinking alcohol two days prior to the onset of the present complaints. He is most likely suffering from:  
a. Delirium tremens  
b. Alcoholic hallucinosis  
c. Schizophrenia  
d. Seizure disorder
31. All are associated with Wernicke's encephalopathy except.  
a. Cog wheel rigidity  
b. Alteration in mental function  
c. 6th nerve palsy  
d. Ataxia
32. Wernicke's encephalopathy involves which part of CNS:  
a. Mammillary body  
b. Thalamus  
c. Frontal lobe  
d. Arcuate fasciculus
33. A 45 year male with a history of alcohol dependence presents with confusion, nystagmus and ataxia. Examination reveals 6th cranial nerve weakness. He is most likely to be suffering from:  
a. Korsakoff's psychosis.  
b. Wernicke encephalopathy  
c. De Clerambault syndrome.  
d. Delirium tremens.
34. A 40 year old man presents to casualty with history of regular and heavy use of alcohol for ten years and morning drinking for one year. The last alcohol intake was three days back. There is no history of head injury or seizures. On examination, there is no icterus, sign of hepatic encephalopathy or focal neurological sign. The patient had coarse tremors, visual hallucinations and had disorientation to time. Which of the following is the best medicine to be prescribed for such a patient?  
a. Diazepam  
b. Haloperidol  
c. Imipramine

- d. Naltrexone
35. Drug of choice in Delirium tremens is
- Diazepam
  - Phenytoin
  - Chlordiazepoxide
  - Morphine
36. In alcohol withdrawal drug of choice is
- Benzodiazepine
  - Chlordiazepoxide
  - Lithium
  - Haloperidol
37. Widmark Formula is used for:
- Opium
  - Cannabis
  - Alcohol
  - Amphetamine
38. Characteristic of alcohol withdrawal?
- Hallucination
  - Illusion
  - Delusion
  - Drowsiness
39. Morbid Jealousy is seen with
- Alcohol
  - Opium
  - Cannabis
  - Amphetamine
40. Alcoholic Paranoia which of these is seen
- Impulsive behavior
  - Hallucinations
  - Fixed delusions
  - Agitation
41. Which of the following is not a proven part of cognitive behavioral therapy.
- Pre contemplation
  - Contemplation
  - Action
  - Consolidation
42. NOT related to development of drug dependence: (AIIMS Nov 09)
- Personality
  - Family History
  - Pressure by peers
  - Intelligence
43. Formication and delusion of persecution, both are together seen in: (AIIMS May 09)
- LSD psychosis
  - Amphetamine psychosis
  - Cocaine psychosis
  - Cannabis psychosis

**Answer Key**

- |       |       |
|-------|-------|
| 1. D  | 23. C |
| 2. A  | 24. D |
| 3. C  | 25. B |
| 4. A  | 26. C |
| 5. D  | 27. B |
| 6. B  | 28. B |
| 7. B  | 29. D |
| 8. C  | 30. A |
| 9. B  | 31. A |
| 10. D | 32. A |
| 11. D | 33. B |
| 12. D | 34. A |
| 13. D | 35. C |
| 14. C | 36. B |
| 15. C | 37. A |
| 16. C | 38. A |
| 17. D | 39. A |
| 18. D | 40. B |
| 19. C | 41. D |
| 20. D | 42. D |
| 21. C | 43. C |
| 22. D |       |

**Schizophrenia and Other Psychosis**

Psychosis is classically defined as presence of Delusions, Hallucinations, disorganised Behaviour and Loss in touch with reality. On the basis of type of delusions, hallucinations and the duration , the psychotic illnesses can be broadly categorised into

1. Schizophrenia
2. Persistent delusional Disorder
3. Acute and Transient Psychotic Disorders
4. Schizo-affective Disorder.

Schizophrenia:-

Emil kraepelin gave term Dementia precox

Classified psychosis for 1st time into

- i) MDP (Manic depressive psychosis)
- ii) Dementia precox

Eugen Bleuler coined schizophrenia 4's

- autism
- ambivalence (not le to decide for on against)
- affective blunting
- associational loosening

Automatism is not part of schizophrenic

Positive	Negative Symptoms
Hallucination	Amotivation
Delusion	Asociality
Violence	Alogia (absence of language)
	Affective blunting
	Attentional deficit

T. J. Crow in 1980 classified schizophrenia

Type I	Type II
- Acute onset	- Insidious onset
- Precipitating event	- No precipitating Tactor
- Positive symptom	- Negative symptom
- No family history	- Family history present
- Emotions are preserved	- Emotions gone
- NoCT/MRI finding	- Some CT/MRI finding
- Good prognosis	- Poor prognosis

Scheinder's first rank symptoms of schizophrenia: Scheinder in 1960 given these symptoms and level them as First rank, that, If these symptoms are present , there is a high chance of illness being schizophrenia.

11 first rank symptoms

3 made phenomena emotion, action, impulse

3 Thought phenomena insertion, withdrawal, Broadcasting

3 Perception phenomena Thought echo, Running commentary, voices arguing (3rd person auditory hallucination

10 somatic passivity Body is passive recipient of some sensation

Most characteristic all of schizophrenia



11 Delusional perception

No delusion but it is a type of primary delusion (perception normal but meaning is Delusional).

There are four type of Primary delusion , Delusional Memory , Delusional Perception , Delusional mood, and Sudden delusional idea.

**Classification of Schizophrenia**

ICD-10 {India & rest of world}		DSM-IV (America)	
>1 Month	Schizophrenia	>6 month	Schizophrenia
		1-6 month	Schizophreniform Disorder
< 1 Month	Acute Psychosis (A.T.P.D)	< 1 month	Acute Psychosis
Acute and transient psychotic disorder			
For all mcq's purpose we follow DSMIV			

\*\* Usual age of onset of schizophrenia · 20 years, late teens, late adolescence.

\*\* late age of onset= >45 yrs of age.

**Different types of schizophrenia are:**

**Paranoid schizophrenia**

Predominantly delusion and hallucination

\*\* Specially in late onset variety

\*\* m.c type

Personality is usually intact

Good prognosis schizophrenia

**Catatonia schizophrenia**

Mutism Echolalia- Echo of language

Rigidity Echopiastia- Echo of movement

Waxy flexibility (catalepsy) (posturing)

Tx:- of choice ECT+Antipsycholis

\* Best prognosis

**Hebephrenia or disorganized schizophrenia**

- Silly smiles

- Early onset

- Mirror gazing

**Simple schizophrenia**

Only negative symptom, no positive symptoms.

**Undifferentiated schizophrenia**

If symptoms cannot be included in other categories.

**Propf schizophrenia**

Mental retardation earlier + now schizophrenia

**Van-Gogh schizophrenia**

Schizophrenia + self mutilation behavior

**Nuclear schizophrenia**

Catatonia + Hebephrenic

**Etiology:**

1. Genetic hypothesis
  - a. Probably in Mono zygotic twin or both suffering from schizophrenia – 46 – 48%
  - b. Dizygotic twin or single parent schizophrenia or first degree relative suffering from schizophrenia
  - c. Normal population prevalence is < 1%

Chapter 5

2. Neurotransmitter
  - a. Dopamine increase at D2 receptor located mostly at mesocortical, Nigrostriatal & tubulo-infundibular area
  - b. Serotonin increase at frontal areas (Prefrontal Cortex)
3. Family theories of Schizophrenia

**Schism** – No communication between patients so that child is confused

**Skew** – Role reversal of parents so that mother is dominant , aggressive & father is passive.

**Double bind** – Two messages being sent to the child in one sentence so that the child does not know what to follow.

There is no role of family dynamics in the etiology of schizophrenia but exacerbation & relapse of symptoms are higher in schizophrenia in families with **Expressed Emotions** (Emotions expressed by family members towards suffering patient).

<p><b>Hostility</b></p> <p><b>Over involvement</b></p> <p><b>Critical comments</b></p>	}	<p><b>Associated with poor prognosis</b></p>
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Emotional Warmth & positive regards-is a positive EE which are indicative of good prognosis..

**Good Prognostic Factors Poor Prognostic Factors**

Good Prognostic Factors	Poor Prognostic Factors
(1) Late Onset	(1) Younger age of onset
(2) Catatonic features	(2) Disorganized type
(3) Pyknic Built	(3) Asthenic built
(4) No Family history	(4) Family history present
(5) Acute onset	(5) Chronic type
(6) Affective features present or atypical Feature Present	(6) Blunting of affect
(7) Type I	(7) Type II

**PREVALENCE OF SCHIZOPHRENIA:**

- ✓ General population: 1%
- ✓ Sibling affected: 8%
- ✓ Single parent affected: 11%
- ✓ Both parents affected: 40%
- ✓ Dizygotic twin: 12%
- ✓ Monozygotic twin: 47%

**COURSE AND PROGNOSIS (OUTCOME)**

- ✓ 20% make a full recovery from the acute illness and have no relapses
- ✓ 35% recover completely but have repeated relapses with full recovery each time 35% have recurrent acute episodes with incomplete recovery each time. They are left with negative symptoms which become more disabling after each relapse 10% have a rapid downhill course from the outset and have persistent positive and negative symptoms

**Acute and transient Psychotic disorders (A.T.P.D)**

Onset = abrupt to acute

Recovery occurs within one month

If it persists for > 1 months , then we need to reevaluate so as to classify it under a diagnostic category

**Schizophreniform disorder:** symptoms of psychosis more than 1 month but less than 6 months

**Schizo affective disorders**

The symptoms of schizophrenia and mood disorders are prominently present within the same episode

Types for most of time of disorder,

1. Schizoaffective Disorder, manic type
2. Schizoaffective Disorder, depressive type
3. Schizoaffective Disorder, mixed type

T/t will depend on the symptomatology

### **Delusional disorder**

Clinical features: Well systematized delusions of non bizarre type and functioning of the patient in other areas eg self care, occupation etc are usually intact or normal.

Non bizarre delusions (i.e. involving situations that occurs in real life, such as being followed, Poisoned, infected, loved at a distance or deceived by spouse is present. Distorted observations. Inferences and fantasies, very commonly the patient sees himself as a victim of some concerned action.

Types- erotomanic type (DeClembaults syndrome ) delusions that another person usually of higher states is in love with the individuals.

Jealous type – delusion of inflated worth. Power etc.

Persecutory – being malevolently treated in some way.

Somatic type- person has some physical defect or general medical condition.

Capgras syndrome: Familiar person appears as Stranger Posing as Familiar (i.e. Patient feels his doctor is not the real one but somebody else is posing as his doctor)

Fregoli Syndrome (Patient believes that a single known person is posing as various people around him and thus is action as an imposter)

Cotard syndrome – Nihilistic delusions that person has lost everything. Usually associated with depression.

Lycanthropy – delusion of being a wolf

Heautoscopy – false belief that one has doubles.

A 30 year old person thinks that his wife and boss have an affair, he also thinks that his friend is also involved in this and he provides them with technological support. Otherwise he is normal.

- a. Persistent delusion disorder
- b. Schizophrenia
- c. Paranoid personality disorder
- d. Acute and transient psychotic disorder

Ans. a. Persistent delusion disorder

- In persistent delusional disorder, the person is usually having a single non-Bizarre delusion and other than everything is intact.
- The personality, the coagulation the behaviour other than that belief is totally normal and personality is well preserved.
- In schizophrenia, there is multiple delusion & hallucinations, deterioration in personality and other abnormal behaviour.
- As in this case other than belief of life having an affair everything else is intact so the answer is persistent delusional disorder.

### **SHARED PSYCHOSIS: or Induced Delusional Disorder**

A person close to patient affected and shares his delusions, usually seen in females. Folie a deux: when 2 people are involved; Folie a trios when 3 people are involved. Treat the person with delusion and separation of 2nd person from the inducer.

## **Treatment**

### **General Guidelines**

1. Treatment of all conditions having psychotic symptoms is done with antipsychotic medications The choice of medication is decided upon the desired & undesired side effects of medication. For e.g. If patient is to be sedated an antipsychotic as S/E may be used and Vice – Versa.
2. Duration of treatment is another issue. Antipsychotic normally take 3 – 4 week before they start acting treatment during this phase of acute psychotic patient who is violent is difficult & needs hospitalization. Life long treatment of antipsychotic may be recommended depending on the illness & the patient profile.
3. Prognosis of patient depends on good & bad prognosis factors
4. Psychotherapeutic interventions are required after the acute phase is over
  - a. Psycho education to family members about the illness & treatment strategies
  - b. Individual counseling for patient
  - c. Rehabilitation for patients with schizophrenia teaching the social skills, activities of daily living, group interaction, overcoming fears etc.

**ANTIPSYCHOTICS** (Neuroleptics): Dopamine antagonists

**ATYPICAL TYPICAL**

1. Mode of action SDA (Serotonin dopamine antagonist) DA (Dopamine antagonist)
2. Less release of prolactin More release of prolactin
3. Less EPS More EPS
4. Treats both positive and negative symptoms Treat only +ive symptoms

**Important Points**

1. Weight gain are seen with i. CLOZAPINE ii. OLANZAPINE
2. Minimal weight gain with - Ziprasidone
3. Atypical drug which also acts as antidepressant - Ziprasidone

TYPICAL ( D2 receptors)	ATYPICAL ( D4 and 5HT 2 receptors)
Phenothiazines	
Chlorpromazine	Clozapine (DOC for treatment resistant schiz)
Triflupromazine	Risperidone
Thioridazine	Olanzapine
Fluphenazine	Quetiapine
Trifluoperazine	Ziprasidone
	Aripiprazole
Thioxanthines	Sertindole
Thiothixene	
Flupenthixol	

Butyrophenones	= less EPS
Haloperidol	= less hyperprolactinaemia
Trifluoperidol	
Pimozide	

**DEPOT ANTIPSYCHOTICS:** For patients with poor compliance

Haloperidol decanoate, Fluphenazine decanoate

Zuclopenthixol decanoate

Flupenthixol decanoate

**S/E of Antipsychotics**

**CNS**

Sedation (most common), seizures

A. Extrapyramidal side effects

1. Dystonia = **Earliest** to appear side-effect, develop within minute to hours of drug intake.
  - Involuntary muscle spasm leading to involuntary movements of face, neck , jaw. Occur early in the course of T/t; most common in young man & associated high potency antipsychotics.
  - T/ t -Ant ichol inergi c drugs eg tr ihexyphenidyl, procycl idine or biperidine or Antihistaminic eg promethazine.
2. Akathisia = **Most common** extrapyramidal side effect. Develops within hours to minutes of drug taken. Characterized by unpleasant feeling of restlessness, a need to move & inability to keep still

T/t-

- a. Dose of neuroleptic medication

- b. Propranolol / beta adrenergic blocker.(first line)
- c. Anticholinergics or benzodiazepines
3. Parkinsonian symptoms = Tremors / rigidity / hypokinesia / drooling of saliva/ stooped posture  
T/t –
  - a. Decrease the dose of Neuroleptic Medication (Antipsychotic drug)
  - b. Anticholinergic and/or Antihistaminergic drugs.
4. Tardive dyskinesia = Tardive meaning “Slow” In this patient Abnormal, irregular, involuntary choreoathetoid movements of Bucco -Lingual -masticatory muscles (Perioral Movements) limbs & the trunk.

It appears late i.e atleast 3 month after starting the Antipsychotic drug.

M/N =

- a. Decrease the dose of typical Antipsychotic
- b. Switch to an atypical drug Preferably Clozapine.
- c. Tetrabenazine
5. **Neuroleptic Malignant syndrome** = Life threatening characterized by high fever, Severe muscle rigidity, Autonomic symptoms viz tremors , sweating, BP, tachycardia, Changing level of consciousness from confusion to coma.

Lab investigation: Increase level of CPK and leukocytosis.

T/t = Supportive (Control fever and maintain hydration) + dantrolene or bromocriptine .

- A. **CVS:** Postural hypotension
- B. **ANTICHOLINERGIC** side effects: dry mouth, constipation, urinary retention, heart blocks (maximum with thioridazine)
- C. **Agranulocytosis:** with Clozapine

Mostly in first 6 months

Risk factors: old age, females

**Treatment:** weekly monitoring of TLC, stop the drug if count less than 3000

- E. **Endocrine:** weight gain ( olanzapine)
- F. **Hyperprolactinemia:** impotence, infertility, menstrual irregularities
- G. **Skin:** rashes with chlorpromazine
- H. **Eye:** retinitis pigmentosa ( Thioridazine)
- I. **Increased blood sugar:** olanzapine, clozapine.

Most common side effect of clozapine is excessive salivation (33%) and sedation (30%). unique side effect of clozapine is

- a. dose independent— Agranulocytosis, (1-2%)
- b. dose dependent side effect — seizures.

### Newer drugs

1. Amisulpride : It is a newer drug in India. It is used European country. It is a D2/D3 dopamine receptor antagonist with well-characterized atypical antipsychotic properties. It has a role in negative symptoms as lower doses that is upto 200 mg and effective in positive symptoms in doses in more than 200 mg.
2. Paliperidone:  
**Paliperidone** (trade name **Invega**), also known as **9-hydroxy risperidone**, is a dopamine antagonist of the atypical antipsychotic class of medications. It is developed by Janssen Pharmaceutica. Invega is an extended release formulation of paliperidone that uses the OROS extended release system to allow for once-daily dosing. **Paliperidone palmitate** (trade name **Invega Sustenna**, ) is a long-acting injectable formulation of paliperidone palmitoyl ester indicated for once-monthly injection after an initial titration period.

### PHARMACOLOGY

Paliperidone is the primary active metabolite of the older antipsychotic risperidone. While its specific mechanism of action is unknown, it is believed paliperidone and risperidone act via similar, if not identical, pathways.

### Mechanism of Action

- The proposed therapeutic activity of the drug in schizophrenia is mediated through a combination of
- Central Dopamine Type 2 (D2)
- Serotonin Type 2 (5HT<sub>2A</sub>) receptor antagonism.
- With additional affinity for antagonism of histaminic (H<sub>1</sub>) and adrenergic receptors (1 &

2) BUT, it has no affinity for the Muscarinic-Cholinergic receptors or  $\alpha_1$  and  $\alpha_2$  adrenergic receptors

**SIDE EFFECTS**

The most common side effects of paliperidone are restlessness and extrapyramidal disorder, including involuntary movements, tremors and muscle stiffness.

**Asenapine** is an atypical antipsychotic developed for the treatment of schizophrenia and acute mania associated with bipolar disorder.

**PHARMACOLOGY**

Asenapine shows high affinity for numerous receptors, including the serotonin receptors, the adrenergic receptors, the dopamine receptors, and the histamine H1 and H2 receptors. Asenapine has been approved by the FDA for the acute treatment of adults with schizophrenia and acute treatment of manic or mixed episodes associated with bipolar I disorder with or without psychotic features in adults.

**SIDE EFFECTS**

Common side effects: (incidence at least 5% or greater and at least twice that for placebo or greater than 10% regardless of placebo rate) Severe akathisia, oral hypoesthesia, somnolence, dizziness, extrapyramidal symptoms other than akathisia, weight gain, insomnia, extreme sedation, headache. Rare side effects: Neuroleptic malignant syndrome (Combination of fever, muscle stiffness, faster breathing, sweating, reduced consciousness, and sudden change in blood pressure and heart rate.), tardive dyskinesia.

**Tiapride** is a drug that selectively blocks D2 and D3 dopamine receptors in the brain. It is used to treat a variety of neurological and psychiatric disorders including dyskinesia, alcohol withdrawal syndrome, negative symptoms of psychosis, and agitation and aggression in the elderly. A derivative of benzamide, tiapride is chemically and functionally similar to other benzamide antipsychotics such as sulpiride and amisulpride known for their dopamine antagonist effects.

**TREATMENT**

**Alcoholism** in alcoholic patients have found that tiapride has anxiolytic effects. Dopamine hyperactivity has been linked with alcohol withdrawal syndrome (AW S), suggesting that tiapride's antidopaminergic effects are the most likely mechanism for its clinical efficacy. While tiapride does not affect positive symptoms of psychosis such as hallucinosis or delirium sometimes manifested in alcohol withdrawal syndrome, if combined with a drug such as carbamazepine that addresses those symptoms, it is ideal for treating alcohol dependency because its metabolism does not depend on liver function and it has low potential for abuse.

**SIDE EFFECTS**

Although it is considered a "safe" medicine, it is, like sulpiride, strictly contraindicated for patients under the age of 18 due to its effects during the process of puberty. Tiapride has been found to cause excess prolactin levels in plasma, which can cause decreased libido, infertility and increased risk of breast cancer. The side-effect reported most commonly to the FDA is rhabdomyolysis, a condition characterized by muscle tissue breakdown. Cardiac abnormalities such as prolongation of the QT interval and torsades de pointes have also been observed.

**MULTIPLE CHOICE QUESTIONS**

1. Maximum heritability is seen in:
  - a. Depression
  - b. Mania
  - c. Schizophrenia
  - d. Panic Disorder
2. The following is a Schneider's first rank symptom:
  - a. Persecutory delusion
  - b. Voices commenting on actions
  - c. Delusion of guilt.
  - d. Incoherence
3. 18 year old male hears voices discussing him in 3rd person has
  - a. Obsession
  - b. Depression
  - c. Mania
  - d. Schizophrenia
4. The primary disturbance in schizophrenia is
  - a. Hallucination
  - b. Illusion
  - c. Psychomotor Retardation
  - d. Formal Thought Disorder
5. Which symptom of schizophrenia respond earliest to treatment
  - a. Negativism
  - b. Paranoid delusions
  - c. Auditory hallucinations
  - d. Apathy
6. Characteristic symptoms of catatonic schizophrenia is
  - a. Stupor
  - b. Rigidity
  - c. Negativism
  - d. All of the above
7. Grimacing and Mannerism is:
  - a. Simple Schizophrenia
  - b. Catatonic Schizophrenia
  - c. Hebephrenic Schizophrenia
  - d. Phobia
8. Early onset and bad prognosis is seen in:
  - a. Catatonic
  - b. Hebephrenic
  - c. Paranoid
  - d. Schizo affective
9. Drugs abuse with symptoms similar like schizophrenia are seen in:
  - a. LSD
  - b. Cannabis
  - c. Heroin
  - d. Amphetamine
10. Bleuler's Criteria for Schizophrenia includes all except:
  - a. Ambivalence
  - b. Loosening of association
  - c. Automatism
  - d. Inappropriate affect
11. Delusions are characteristically seen in
  - a. Schizophrenia
  - b. Delirium
  - c. Dementia
  - d. Schizoaffective
12. Schizophrenia is characterized by A/E
  - a. Delusion of reference
  - b. Delusion of control
  - c. Waxy flexibility
  - d. Altered sensorium
13. Schizophrenia with late onset and good prognosis:
  - a. Simple
  - b. Hebephrenic
  - c. Catatonic
  - d. Paranoid Schizophrenia
14. Most common type of schizophrenia
  - a. Simple
  - b. Hebephrenic
  - c. Catatonic
  - d. Paranoid
15. Schizophrenia is characterized by A/E
  - a. Delusion
  - b. Auditory Hallucination
  - c. Elation
  - d. Catatonia
16. Bad prognostic indicator of Schizophrenia is
  - a. Late onset
  - b. Family history of Schizophrenia
  - c. Positive precipitating factors
  - d. Prominent affective symptoms
17. Loss of insight is seen
  - a. Hysteria
  - b. Anxiety
  - c. OCN
  - d. Schizophrenia
18. First rank symptom of Schizophrenia are all excepta.
  - a. Depersonalization
  - b. Running commentary
  - c. Primary Delusion
  - d. Somatic Passivity
19. Perseveration is:
  - a. Perseveration and inappropriate repetition of the same thoughts.
  - b. When a patient feels very distressed about it.
  - c. Characteristic of schizophrenia
  - d. Characteristic of obsessive compulsive disorder(OCD)
20. Loosening of association is an example of:
  - a. Formal thought disorder
  - b. Schneider's first symptoms
  - c. Perseveration
  - d. Concrete thinking
21. Van Gogh Syndrome is seen in

- a. Mania
  - b. Depression
  - c. Schizophrenia
  - d. OCD
22. Schizophrenia and depression both have A\ E
- a. Formal thought disorder
  - b. Social withdrawal
  - c. Poor personal care
  - d. Suicidal tendency
23. Good prognosis in schizophrenia is indicated by
- a. Soft neurological Signs
  - b. Affective symptoms
  - c. Emotional blunting
  - d. Insidious onset
24. Neurotransmitter related to Schizophrenia pathology are all except
- a. Ach
  - b. Dopamine
  - c. Serotonin
  - d. NA
25. Delusions of control,persecution and self reference are seen in:
- a. Paranoia
  - b. Paranoid schizophrenia
  - c. Mania
  - d. OCD
26. All of the following are associated with better prognosis in schizophrenia except:
- a. Late onset
  - b. Married
  - c. Negative symptoms
  - d. Acute onset
27. A 23 year old engineering student is brought by his family to he hospital with history of gradual onset of suspiciousness ,muttering and smiling without clear reason, decreased socialization. violent outbursts, and lack of interest in studies for 8 months. Mental status examination revealed a blunt affect, thought broadcast, a relatively preserved cognition, impaired judgment and insight. He is most likely to be suffering from
- a. Delusional disorder
  - b. Depression
  - c. Schizophrenia
  - d. Anxiety disorder
28. A 60 year old man is brought to a psychiatrist with a 10 year history, that he suspects his neighbours and he feels that whenever he passes by they sneeze and plan agaist behind his back.He feels that his wife has been replaced by a double and calls police for help. He is quite well groomed alert, occasionally consumes alcohol, likely diagnosis is:
- a. Paranoid personality
  - b. Paranoid schizophrenia
  - c. Alcohol withdrawal
  - d. Conversion disorder
29. A Patient is brought with 6 months history of odd behaviour. There is history of a family member having disappeared some years back. He seems to be talking to himself and something muttering to himself loudly. The likely diagnosis is:
- a. Schizophrenia
  - b. Conversion disorder
  - c. Major depression
  - d. Delusion
30. A 60 year old male suffering says that people staying upwards are talking about him and conspiring against him. He dropped a police complaint against them but the allegations were proved to be wrong. The diagnosis is:
- a. Depression
  - b. Dementia
  - c. Delusional disorder
  - d. Schizophrenia
31. Lallu 40 year has recently started writing books could not be understood by anybody since it contained words which were never there in any dictionary and the theme was very disjoint. Now a days he has become very shy and self absorbed. When he addresses people he speaks about meta philosophical ideas. What is likely diagnosis:
- a. Mania
  - b. Schizohphrenia
  - c. A genius writer
  - d. Delusional disorder
32. Kallu a 24 year old occasional alcoholic had got a change in behaviour. He has become suspicious that people are trying to conspire against him,though his father states that there is no reason for his fears. He is getting hallucinations of voices commenting on his actions what is most probable diagnosis.
- a. Delirium tremens
  - b. Alcohol induced psychosis
  - c. Schizophrenia
  - d. Delusional disorder
33. A patient of Schizophrenia on neurolepts, his psychotic symptoms gets relieved but developed sadness, talks less to others. remain on bed, all of following are likely causes except:
- a. Parkinsonism
  - b. Major depression
  - c. Negative symptoms are still persisting
  - d. He is reacting to external stimuli
34. A patient complains that people living upstairs are always talking about him and conspires against him. His son complains about his weired behaviour like keeping shoes



- in Fridge and wearing vest over shirt. The likely diagnosis is:
- Depression
  - Delusional disorder
  - Dementia
  - Schizophrenia
35. A 16 year old boy does not attend school because of the fear of being harmed by schoolmates. He thinks that his classmates laugh at and talk about him. He is even scared of going out to the market. He is most likely suffering from:
- Anxiety neurosis
  - Manic Depressive Psychosis
  - Adjustment reaction
  - Schizophrenia
36. Suicidal tendency seen in:
- Schizophrenia
  - PTSD
  - Depression
  - OCD
37. Drug treatment of schizophrenic are also except:
- Chlorpromazine
  - Trifluoperazine
  - Clozapine
  - Rivastigmine
38. A 30 year old unmarried woman of average socio-economic background believes that her boss is in secretly love with her. She rings him up at odd hours and writes love letter to him despite his serious warning not to do so. She holds this belief despite contradiction from family members & his denial. However she is able to manage her daily activities as before. She is most likely to be suffering from:
- Depression
  - Schizophrenia
  - Delusional disorder
  - No psychiatric ailment
39. Ramu, a 22 year old single, unmarried man is suffering from sudden onset of 3rd person hallucination for the past 2 weeks. He is suspicious of his family members. And had decreased sleep and appetite. The diagnosis is:
- Schizophrenia
  - Acute Psychosis
  - Acute mania
  - Acute delirium
40. A patient came with complaints of having a deformed nose and also complained that nobody takes him seriously because of the deformity of his nose. He has visited several cosmetic surgeons but they have sent him back saying that there is nothing wrong with his nose. He is probably suffering from
- Hypochondriasis
  - Somatization
  - Delusional Disorder
  - OCD
41. A person of 35 years is having firm belief about infidelity involving the spouse. And he never allow her to go out of home alone. He often locks his house. While going office. In spite of all this he is persistently suspicious about her character. The probable diagnosis is:
- Schizophrenia
  - Delusional parasitosis
  - Clerambault's syndrome
  - Othello syndrome
42. The characteristic symptom of organic psychosis is
- Hallucination
  - Depression
  - Transient Delusion
  - Anxiety
43. Characteristic Symptom in induced psychotic disorder is
- Insomnia
  - Profound mood disturbance
  - Accepting delusions of other person
  - Suicidal Ideation
44. A man hits his neighbour next day he feels that police is behind him and his brain is being controlled by radio waves by his neighbour. The probable diagnosis is:
- Personality disorder
  - Passivity feelings
  - Psychosis
  - Organic brain syndrome
45. Rekha 27 years, old female thinks her nose is ugly. Her idea is fixed and not shared by anyone else. Whenever she goes out of home she hides her face. She visits a surgeon for plastic surgery. Next step would be:
- Investigate & then operate
  - Reassure the patient
  - Immediate operation
  - Refer to psychiatrist
46. A 41 year old woman working as an Executive Disorder is convinced that the management has denied her promotion by preparing false reports about her competence and have forged her signature on sensitive documents so as to convict her. She files a complaint in the police station and requests for security. Despite all this she attends to her work and manages the household. She is suffering from:
- Paranoid Schizophrenia
  - Late onset Psychosis
  - Persistent Delusional Disorder
  - Obsessive Compulsive Disorder
47. The following is not an atypical antipsychotic:

- a. Thioridazine  
b. Clozapine  
c. Olanzapine  
d. Risperidone
48. Least Extrapyramidal S/E are seen in:  
a. Halo peridol  
b. Thiordazine  
c. Clozapine  
d. Chlorpromazine
49. Antipsychotic drug with prolonged action:  
a. Trifluperzine  
b. Thioridazine  
c. Penfluridol  
d. Fluphenazine
50. All the following statement about clozapine are true except:  
a. It is used in schizophrenia  
b. Mat precipitate seizure  
c. May cause agranulocytosis  
d. Extrapyramidal side effects are seen
51. Antipsychotic drug with least extrapyramidal effects is:  
a. Clozapine  
b. Risperdone  
c. Thioridazine  
d. Haloperidol
52. Adverse effect of clozapine:  
a. Hypertension  
b. Sialorrhea  
c. Extrapyramidal S/E  
d. Neuroleptic malignant synfrome
53. A patient of schizophrenia on CPZ ( chlorpromazine )develops auditory hallucination again. The next drug to be given is:  
a. Haloperidol  
b. Clozapine  
c. Sulpride  
d. Tianeptin
54. Tradive dyskinesia is produced by following except:  
a. Fluphenazine  
b. Haloperidol  
c. Chlorperidol  
d. Clozapine
55. Irresistible urge to move about with inner restlessness is called:  
a. Akinesia  
b. Hyperkinesia  
c. Dyskinesia  
d. Akathisia
56. A 19 year old boy suffering from chronic schizophrenia is put on haloperidol in the dose of 20mg/day.A week after the dose of 20mg/day .A week after the intitation of medication the patient shows be restless , fidgety, irritability and cannot sit at one place. The most appropriate treatment strategy is:  
a. Increase in the dose of haloperidol  
b. Addition of antiholinergic drug  
c. Addition of betablocker  
d. Adding another antipsychotic
57. A patient with acute psychosis, who is on haloperidol 20mg/day for last 2 days, has an apisode characterized by tongue protrusion, oculoogyric crisis, stiffness and abnormal posture of limbs and trunk without loss of consciousness for last 20 minutes before presentation to casualty. This improved with in few minutes after administration of diphenhydramine. The most likely diagnosis is:  
a. Acute dystonia  
b. Akathisa  
c. Tardive dyskinesia  
d. Neuroleptic malignant syndrome
58. An elderly woman suffering from schizophrenia is on antipsychotic medication. She developed purposeless involuntary facial and limb movements, constant chewing and puffing of cheeks. Which of the following drugs is least likely to be involved in this side effects:  
a. Haloperidol  
b. Clozapine  
c. Fluphenazine  
d. Loxapine
59. A 30 year old man who was recently started on haloperidol 30mg/day developed hyperpyrexia, muscle rigidity, akinesia, mutism sweating, tachycardia and increased blood pressure. The investigations showed increased WBC count, increased creatinine phosphokinase:  
a. Drug overdose  
b. Neuroleptic malignant syndrome  
c. Drug induce parkinsonism  
d. Tardive dyskinesia
60. A patient was on treatment with trifluperazine for some time. He presents with complaint of hyperthermia, lethargy and sweating. Needed investigations are:  
a. CT scan brain & hemogram  
b. Hemogram Electrolyte level and creatinine  
c. ECG , Chest X – Ray and Hemogram  
d. Sleep study
61. Carbamazepine may be used in all except:  
a. Mania  
b. Alcohol dystonia  
c. Schizophrenia  
d. Trigeminal Neuralgia

62. A patient of Schizophrenia treated for 5 years developed perioral movements. Likely diagnosis is:
- Tardive Dyskinesia
  - Muscular Dystonia
  - Akathisia
  - Malignant neuroleptic syndrome
63. A patient on antipsychotic for past 4 weeks is brought to the emergency with complaints of acute onset of fever, excessive sweating confusion, rigidity of limbs and decreased communication. Examination reveals Temperature of 104 F, P/R – 120/ min BP – 150/100 with disorientation diagnosis:
- Lithium Toxicity
  - Aggravation of psychosis
  - Dystonia
  - Neuroleptic malignant syndrome

**Answer. Key**

- |       |         |
|-------|---------|
| 1. B  | 33. D   |
| 2. B  | 34. D   |
| 3. D  | 35. D   |
| 4. D  | 36. A,C |
| 5. C  | 37. D   |
| 6. D  | 38. C   |
| 7. B  | 39. B   |
| 8. B  | 40. C   |
| 9. D  | 41. D   |
| 10. C | 42. C   |
| 11. A | 43. C   |
| 12. D | 44. C   |
| 13. D | 45. D   |
| 14. D | 46. C   |
| 15. C | 47. A   |
| 16. B | 48. C   |
| 17. D | 49. D   |
| 18. A | 50. D   |
| 19. A | 51. A   |
| 20. A | 52. B   |
| 21. C | 53. A   |
| 22. A | 54. D   |
| 23. B | 55. D   |
| 24. A | 56. C   |
| 25. B | 57. A   |
| 26. C | 58. A   |
| 27. C | 59. B   |
| 28. B | 60. B   |
| 29. A | 61. C   |
| 30. D | 62. A   |
| 31. B | 63. D   |
| 32. C |         |

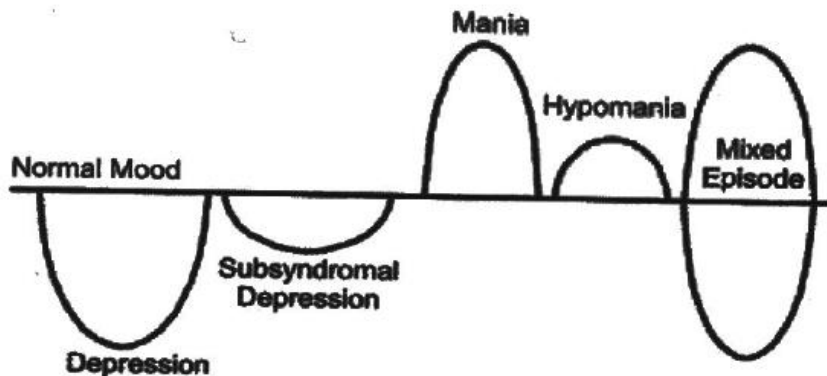
## Mood Disorders & Affective Disorders

### Mania

Bipolar Affective Disorder (BAD) = it is characterized by repeated (ie at least two) episodes in which the patient's mood and activity levels are significantly disturbed so there may be alternate episodes of mania & depression.

Male: Female = 1:1 ( means age of onset 30 years), this disorder tends to occur in episodes lasting usually 3-4 months

Hypomania = is lesser degree of mania where the function of the person is relatively intact



**Fig: Bipolar Disorder: Clinical Picture**

Criteria for a Manic Episode

- A. A distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting **at least 1 week** (or any duration if hospitalization is necessary)
- B. During the period of mood disturbance, three (or more) of the following symptoms have persisted (four if the mood is only irritable) and have been present to a significant degree:
  1. Inflated self-esteem or grandiosity
  2. Decreased need for sleep (e.g., feels rested after only 3 hours of sleep)
  3. More talkative than usual or pressure to keep talking
  4. Flight of ideas or subjective experience that thoughts are racing
  5. Distractibility (e.g., attention too easily drawn to unimportant or irrelevant external stimuli)
  6. Increase in goal-directed activities (either socially, at work or school, or sexually) or psychomotor agitation
  7. Excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying spree, sexual indiscretion, or foolish business investments)
- C. The symptoms do not meet criteria for a mixed episode.
- D. The mood disturbance is sufficiently severe to cause marked impairment in occupational functioning or in usual social activities or relationships with others, or to necessitate hospitalization to prevent harm to self or others, to harm self or others, or there are psychotic features.
- E. The symptoms are not due to the direct physiologic effect of a substance (e.g. a drug of abuse, a medication, or other treatment) or a general medical condition (e.g. hyperthyroidism)

Note : Symptoms lasting for 7 days. Manic- like episodes that are clearly caused by somatic antidepressant treatment (e.g., medication, electroconvulsive therapy, light therapy) should not count toward a diagnosis of bipolar I disorder.

### **PROGNOSTIC FACTORS IN MOOD DISORDERS**

#### **Good Prognostic Factors**

1. Acute or abrupt onset
2. Typical clinical features
3. Severe depression
4. Well adjusted pre morbid personality
5. Good response to treatment.

**Poor Prognostic Factors**

1. Co-morbid medical disorder(s), personality disorder(s) or alcohol dependence
2. Double depression (acute depressive episode superimposed on chronic depression or dysthymia)
3. Catastrophic stress or chronic ongoing stress
4. Unfavorable early environment
5. Marked hypochondriacal features, or mood incongruent psychotic features
6. Poor drug compliance.

Course: Usual course of Depression: 6-9 Months

MANIA: 3-6 Months

Rapid Cycling Bipolar Affective Disorder - Occurance of 4 or more episodes / year is called as rapid cycling.

Doc of Rapid Cycling is sodium valproate.

DOC – lithium carbonate and/or – Atypical antipsychotic in acute mania, prophylaxis of mania

DOC in pregnant lady with bipolar disorder is lithium.

**Aetiology**

Biological theories

1) Genetic - Life time risk for the first degree relative of Bipolar mood disorder patient is 25% & of recurrent depressive disorder patients is 20%.

- If one parent Bipolar mood disorder risk is 27% & both parents it is 74%.
- Concordance rate in Bipolar disorder is 70% in Monozygotic twins & 20% for Dizygotic twins.
- Concordance rate in Unipolar depression is 50% in Monozygotic twins & 46% and for Dizygotic twins is 20%.
- Sleep studies

In depression, decreased REM latency & Increased duration of the first REM sleep & delayed sleep onser.

Management = (1) BAD, currently manic state = mood stabilizer ± Antipsychotic ± Benzodiazepine

(2) BAD, currently depression = mood stabilizer ± antidepressant

(3) Rapid cycling BAD( 3 4 episodes in past 12 months) = Sodium Valproate

Mood stabilizers – Lithium: Low therapeutic index

Serum levels: acute phase- 0.8 –1.2 meq/l

Stabilization phase: 0.6 - 0.8 meq/L.

Acts by inhibiting Na/K ATPase, adenosine receptors

Behaviorally like Na; no metabolism, excretion via kidney unchanged: no liver toxicity

DOC in pregnancy & lactation

PREGNANCY	Lactation
The various drugs used are causes Lithium – Ebstein’s anomaly 1:10,00	Lithium is excreted unchanged through kidneys and also is secreted in breast milk and infant kidneys are immature to handle lithium.
Carbamazepine – Neural tube defect 1:1300	So in lactation we have to shift to either Sodium valproate / carbamazepine.
Sodium valproate – Neural tube defect 1:700 Though the ebstein’s anomaly is a problem with lithium but incidence is very low compared to carbamazepine, sodium valproate so, the drug of choice in pregnancy is lithium.	

**Side Effects:** fine Tremors (TOC propanolol), hypothyroidism, acne, renal toxicity, leukocytosis  
other drugs are:

## Clinical Pharmacology of Mood Stabilizers

	<b>Agent and Dosing</b>	<b>Side effects and other effects</b>
<b>1. Lithium</b>		
Starting dose: 300 mg bid or tid		<b>Common side effect :</b> Nausea/anorexia/ diarrhea, fine tremor, thirst, polyuria, fatigue, weight gain, acne, folliculitis, neutrophilia, hypothyroidism
Therapeutic blood level: 0.8-1.2 meq/L		Blood level is increased by thiazides, tetracyclines, and NSAIDs Blood level is decreased by bronchodilators, verapamil, and carbonic anhydrase inhibitors Rare side effect: Neurotoxicity, renal toxicity, hypercalcemia, ECG changes
<b>2. Valproic acid</b>		
Starting dose: 250 mg. tid		<b>Common side effects:</b> Nausea/anorexia, weight gain, sedation, tremor, rash alopecia
Therapeutic blood level: 50-125		Inhibits hepatic metabolism of other medications Rare side effects: Pancreatitis, hepatotoxicity, Stevens-Johnson syndrom



**Criteria for Major Depressive Episode (According to ICD 10)****Mild depression** – (2) +2 symptom of depression for 14 days.**Moderate** -(2) +4 symptom for 14 days

- Without somatic syndrome
- With somatic syndrome

**Severe** - >(2)+4 for 14 days

- Without psychotic features
- With psychotic symptoms
- Delusion of sin/guilt, Nihilistic Delusion ( cotard's syndrome )
- Auditory hallucinations

**SOMATIC SYNDROME IN DEPRESSION (ICD-10)**

The somatic syndrome is characterized by:

- a. Significant decrease in appetite or weight loss - >5% in one month
- b. Early morning awakening, at least 2 (or more) hours before the usual time of awaking
- c. Diurnal variation, with depression being worst in the morning
- d. Pervasive loss of interest and loss of reactivity to pleasurable stimuli
- e. Psychomotor agitation or retardation.

**SUICIDAL RISK: SOME IMPORTANT FACTORS**

Suicidal risk is much more in the presence of following factors:

- a. Presence of marked hopelessness
- b. Males; age>40; unmarried, divorced/widowed
- c. Written/verbal communication of suicidal intent and/or plan
- d. Early stages of depression
- e. Recovering from depression (At the peak of depression, the patient is usually either too depressed or too retarded to commit suicide)
- f. Period of 3 months from recovery.

Types

(a) unipolar depression.

(b) Recurrent depression

(c) Bipolar depression – depression alternating with mania

(d) Depression. due to general medical condition. other name of depression in 1960 were

Reactive depression - Depression in reaction to some loss

Endogenous depression - Depression having Endocrinal basis/ not because of any stress.

Involuntional Melancholia - Described by Kraepelin, this is a form of severe depression which occurs in the Involuntional period of life (i.e 40-45 years of age) Typically, Characterised by marked agitation, multiple somatic symptoms. Presently, it is no longer independent entity but is used to describe the severity of depressive episode.

**ATYPICAL DEPRESSION**

CF =

1) mood reactivity is present i.e the mood brightens in response to actual or potential Positive events.

2) Wt gain or increased appetite

3) Hypersomnia

4) Long standing pattern of interpersonal rejection sensitivity (not limited to episodes of mood disturbance)

5) Leaden paralysis- Patient would feel body is very heavy like Lead (heavy metal).

Treatment of atypical depression= MAO Inhibitors (moclobemide, phenelzine).

**Anaclitic depression**

Separation from the mother figure in 5 to 6 months during the infancy, leads to a infant crying relentlessly.

Stops feeding and hence starts losing weight and does not go in the lap of strangers (strangers anxiety)

A picture simulating depression is named as a anaclitic depression (concept given by Resenpitz).

**Management** = Mainstay of T/t is pharmacotherapy i.e an antidepressant ± cognitive therapy

SSRI (specific serotonin reuptake inhibitor) viz Fluoxetine, Sertraline, Paroxetine, Fluvoxamine &amp; citalopram.

Tricyclic antidepressant like amitriptyline or imipramine but use is limited by the side effects especially anticholinergic side effects, cardiac side effects and orthostatic hypotension.



**TREATMENT** of choice for severe depression with psychotic symptoms is E.C.T. and also for depression with suicidal attempts or severe suicidal ideas is E.C.T. (Electro- Convulsive Therapy) or Antidepressants & antipsychotics.

### **CLASSIFICATION OF ANTIDEPRESSANTS DRUGS**

1. Reversible inhibitors of MAO-A (RIMAS)

Moclobemide, Clorgyline

2. Tricyclic antidepressants (TCAs)

A. NA + 5-HT reuptake inhibitors

Imipramine, Amitriptyline, Trimipramine, Doxepin, Dothiepin, Clomipramine.

B. Predominantly NA reuptake inhibitors

Desipramine, Nortriptyline, Amoxapine, Reboxetine

3. Selective serotonin reuptake inhibitors (SSRIs)

Fluoxetine, Fluvoxamine, Paroxetine, Sertraline, Citalopram, Escitalopram

4. NASSA - Mirtazapine

5. SNRI - Venlafaxine, Duloxetine

6. SSRE - Tianeptine

7. NDRI - Bupropion.

8. NSRI - Milancipram

9. Atypical antidepressants - Trazodone, Mianserin

Safety profile: SSRI'S are safer than Tricyclics in overdose

N.B For severe depression The drug of choice is TCA and for mild to moderate depression all the Drugs are equally effective and the choice depends upon the Side -Effect profile of drugs.

### **Drugs of choice**

1. Elderly : SSRI

2. Suicidal : SSRI

3. Nicotine dependence : Bupropion

4. Peptic ulcer : Doxepin

5. Atypical depression : MAOI'S

6. Psychotic depression : Amoxapine

7. Eating disorder : Fluoxetine

8. Panic disorder : SSRI

### **ECT**

Indication of ECT use

1. Acute depression

2. Depression , mania , schizophrenia c is refractory to drug T/t

3. Intolerable side effects

4. Depression with psychotic features or suicidal risk

5. Catatonic schizophrenia

6. In conditions where are want early control very poor intake, postpartum state.

B) Absolute contraindication - None, Raised ICT is now a relative contraindication of E.C.T.

Side effects of ECT's

1) Reversible amnesia which is both anterograde and retrograde more of retrograde: more with bilateral ECT

2) Confusion in postictal period , headache, muscle ache etc.

3) Fractures, dislocations: with direct ECT

Mechanism of action: most accepted mechanism is redistribution of amines in synaptic cleft.

Marker of ECTs is increase in brain derived nerve growth factor (BDNF).

Other modalities of treatment are rTms ( Repetitive Transcranial magnetic stimulation) and Vagus nerve Stimulation.

### **Dysthymia**

Described in 1990. defined as sub-syndromal depressive symptoms for 2 years. A chronic sub syndromal depression of mood which does not currently fulfill the criteria for recurrent depressive disorder, mild or moderate severity , in terms of either severity or duration or individual episodes although the criteria for mild depressive episodes may have been fulfilled in the past, particularly at the onset of the disorder . The

balance between individuals' phases of mild depression and intervening periods of comparative normality as well, but most of the time ( often for months at a time ) they feel tired and depressed; everything is an effort and nothing is enjoyed. They brood and complain, sleep badly and feel inadequate, but are usually able to cope with basic demands of everyday life. Dysthymia therefore has much in common with the concept of depressive neurosis or neurotic depression . If required, Age of onset may be specified as early (in late teenage or the twenties)

### **Diagnostic guidelines**

The essential features are a very long standing sub syndromal depression of mood, which is never or only very rarely severe enough to fulfill the criteria for recurrent depressive disorder, mild indefinitely. When the onset is later in life, the disorder is often the aftermath of a depressive episode and associated with bereavement or other obvious stress.

Also earlier called as Depressive personality Disorder (1940) and Neurotic depression (1960).

**DOUBLE DEPRESSION:** It is Major depression disorder on dysthymia, or Major depression on Neurotic depression or Major depression on Depressive Personality disorder.

**POST-PARTUM DEPRESSION:** usually develops after third day postpartum. Persistent mood (affective) disorders

### **Cyclothymia**

A persistent instability of mood, involving numerous periods of mild depression and mild elation. This instability usually develops early in adult life and pursues a chronic course, although at times the mood may be normal and stable for months at a time. The mood swings are usually perceived by the individuals as being unrelated to life events. The diagnosis is difficult to establish without a prolonged period of observation or an unusually good account of the individual's past behavior. Because the swings are relatively mild and the periods of mood elevation may be because the mood changes. Although present, is less prominent than cyclical changes in activity, Self-confidence, sociability, or appetitive behavior. If required, age of onset may be specified as early (in late teenage or the twenties) or late.

**Diagnostic guidelines** The essential features is a persistent instability of mood, involving numerous periods of mild depression and mild elation. None of Which has been sufficiently severe or prolonged to fulfill the criteria for bipolar affective disorder or recurrent depressive disorder Includes: affective personality disorder, Cycloid personality, Cyclothymic personality

### **Newer drugs**

**Milnacipram :** It is a newer anti depressant. It is nor adrenergic blocker as well as serotonin blocker. It has more blocking activity for nor adrenergic receptors thereby has better efficacy in retarded depression. 4 . **Magnesium valproate (MgVPA)** is an anticonvulsant, and the effects it exerts are the result of valproic acid and magnesium acting in a complementary way. The effects of valproic acid alone are well documented; it is thought to increase the cerebral concentration of - aminobutyric acid (GABA), increase the Cl<sup>-</sup> and K<sup>+</sup> ion conductance, and reduce N-methyl-D-aspartate (NMDA) receptor stimulation. The importance of magnesium ion alone in the excitation of the CNS has been observed in both animal and human studies. The addition of magnesium to valproic acid, forming MgVPA, is thought to reduce Ca<sup>2+</sup> ion conductance, activate the Na<sup>+</sup>/K<sup>+</sup> ion pump and modulate the NMDA receptors of the neuronal membrane in addition to the effects already mentioned.

### **Post - Partum Disorder-**

One percent of all females going through postpartum period go through post partum psychiatric disorders.

They are categorized as

Postpartum Blues – 80% - Normal irritability with a few symptoms.

Postpartum depression – 15%

Postpartum Psychosis – 1 -4%

Duration usually After 3rd Day – 4 Weeks. If Psychiatric symptoms are found within first 72 hrs of delivery it usually indicates organicity- Most commonly the presentation includes mixture of depressive. Manic and psychotic symptoms also called as Affective symptoms. Onset of psychiatric symptoms 6 weeks postpartum indicates most commonly towards abnormal thyroid function test.

### **New Drugs**

**Dapoxetine**, marketed as **Priligy**, **Kutub**, or **Duratia**, is the first compound developed specially for the treatment of premature ejaculation(PE) in men 18–24 years old. Dapoxetine works by inhibiting serotonin

transporter, increasing serotonin's action at the post synaptic cleft, and as a consequence promoting ejaculatory delay. As a member of selective serotonin reuptake inhibitor (SSRI) family, dapoxetine was initially created as an antidepressant. However, unlike other SSRIs, dapoxetine is absorbed and eliminated rapidly in the body. Its fast acting property makes it suitable for the treatment of PE but not as an antidepressant

#### **Mechanism of actions**

The mechanism through which dapoxetine affects premature ejaculation is still unclear. However, it is presumed that dapoxetine works by inhibiting serotonin transporter and subsequently increasing serotonin's action at pre and postsynaptic receptors. Human ejaculation is regulated by various areas in the central nervous system (CNS). The ejaculatory pathway originates from spinal reflex at the thoracolumbar and lumbosacral level of spinal cord activated by stimuli from male genital. These signals are relayed to the brain stem, which then is influenced by a number of nuclei in the brain such as medial preoptic and paraventricular nuclei.

#### **Adverse effects**

The most common effects when taking dapoxetine are nausea, dizziness, dry mouth, headache, diarrhea, and insomnia. Discontinuation due to adverse effects is dose related.

#### **Agomelatine**

It is an antidepressant drug for the treatment of major depressive disorder and has been reported to have a reduced level of sexual side effects as well as discontinuation effects compared to some other antidepressants. Agomelatine may also have positive effects on sleep. Agomelatine is a melatonergic agonist MT1 and MT2 receptors and 5-HT<sub>2C</sub> antagonist. Binding studies indicate that it has no effect on monoamine uptake and no affinity for adrenergic, histaminergic, cholinergic, dopaminergic and benzodiazepine receptors, nor other serotonergic receptors.

#### **PHARMACODYNAMICS**

Agomelatine resynchronises circadian rhythms in animal models of delayed sleep phase syndrome[10] and other circadian rhythm disruptions. It increases noradrenaline and dopamine release specifically in the frontal cortex and has no influence on the extracellular levels of serotonin.

#### **SIDE EFFECTS**

No relevant modification in agomelatine pharmacokinetic parameters in patients with severe renal impairment has been observed. Agomelatine is contraindicated in patients with hepatic impairment.

**MULTIPLE CHOICE QUESTIONS**

1. A 50 year old male presents with a 3 year history of irritability, low mood, lack of interest in Surroundings and general dissatisfaction with everything. There is no significant disruption in his sleep or appetite. He is likely to be suffering from:
  - a. Major depression
  - b. No psychiatric disorder
  - c. Dysthymia
  - d. Chronic fatigue syndrome
2. Nihilistic ideas are seen in:
  - a. Depression
  - b. Schizophrenia
  - c. Mania
  - d. OCN
3. Endogenous Depression is characterized by A/E
  - a. Loss of Self esteem
  - b. Guilt psychosis
  - c. Third person hallucination
  - d. Paranoid feeling
4. The psychological disorder most commonly associated with myxedema
  - a. Mania
  - b. Depression
  - c. Phobia
  - d. Paronia
5. Most common psychiatry disorder is
  - a. Dementia
  - b. Schizophrenia
  - c. Depression
  - d. Paronia
6. Neurotransmitters involved in depression are
  - a. GABA and Dopamine
  - b. Serotonin and Norepineprine
  - c. Serotonin and Dopamine
  - d. Norepinephrine and GABA
7. Most common age for depression is
  - a. Middle age men
  - b. Middle age female
  - c. Young girl
  - d. Children
8. Intense nihilism, somatization and agitation in old age are the hallmark symptoms of:
  - a. Involutional melancholia
  - b. Atypical depression
  - c. Somatized derpression
  - d. Depression
9. An 18 year old student complaint of lack of interest in studies for last 6 months. He has frequent quarrels with his parents and has frequent headaches. The most appropriate clinical approach would be:
  - a. Leave him as normal adolescent problem
  - b. Rule out depression
  - c. Rule out migraine.
  - d. Rule out an oppositional defiant disorder.
10. True about psychotic feature in depression:
  - a. Found in severe depression
  - b. Found in moderate depression
  - c. Mood incongruent psychotic feature
  - d. Cyclothemia
11. Otto Veraguth sign is found in
  - a. Mania
  - b. Anxiety
  - c. OCD
  - d. Depression
12. True about major depressive disorder
  - a. Commonly seen in female
  - b. Recovery is complete after treatment
  - c. Associated with hypothyroidism
  - d. Family H/O major depression
13. "Nihilistic delusions" are seen in:
  - a. Endogenous depression
  - b. Double depression
  - c. Depression in involutional stage
  - d. Cyclothymia
14. Suicidal tendencies are most common in:
  - a. Involutional depression
  - b. Reactive depression
  - c. Psychotic depression
  - d. Childhood depression
15. Most common type of post puerperal psychosis is:
  - a. Depression
  - b. Anxiety
  - c. Mania
  - d. Suicide
16. A 41 year old woman presented with a history of aches and pains all over the body and general weakness for four years. She cannot sleep because of the illness and has lost her appetite as well. She has lack of interest in work and doesn't like to meet friends and relatives. She denies feeling of sadness. Her most likely diagnosis is:
  - a. Somatoform pain disorder
  - b. Major depression
  - c. Somatization disorder
  - d. Dissociative
17. A 34 year old housewife reports a three month history of feeling low, lack of interest in activities, lethargy, multiple decreased appetite and disturbed sleep with early morning awakening. She is likely to benefit from:
  - a. Anti-psychotics
  - b. Anti-depression
  - c. Anxiolytics
  - d. Hypno-sedatives

18. A 50 year old man has presented with pain in back, lack of interest in recreational activities, low mood, lethargy, decreased sleep and appetite for two months. There was no history suggestive of delusions or hallucination. He did not suffer from any chronic medical illness. There was no family history of psychiatric illness. Routine investigations including haemogram, renal radiogram did not reveal any abnormality.  
This patient should be treated with:
- Haloperidol
  - Sertraline
  - Alprazolam
  - Olanzapine
19. Drug of choice in depression in old person is
- Fluoxetine
  - Buspirone
  - Amitriptyline
  - Imipramine
20. Rathi, 26 years old female diagnosed to be suffering from depression. Now for the past 2 days had suicidal tendency, thought & ideas. The best treatment is
- Amitriptyline
  - Selegidine
  - Haloperidol+CPZ
  - ECT
21. A patient comes in stupor condition patient's parents give history of being continually sad and suicidal attempts not eating and sleeping most of the time. The treatment is
- ECT
  - Antidepressant
  - Antipsychotic
  - Sedatives
22. Most common mental disorder as a cause of suicide
- Mania
  - Depression
  - Alcohol dependence
  - Schizophrenia
23. Suicidal tendencies seen in:
- Depression
  - Posttraumatic stress disorder
  - Schizophrenia
  - Substance abuse
24. The clinical features of mania include:
- Anhedonia
  - Elated mood
  - Avolition
  - Delusion of grandiosity
25. Which of the following is not seen in mania
- Hypersexuality
  - Hyperactivity
  - Decreased sleep
  - Clouding of consciousness
26. Not a features of mania
- Elation
  - Disorientation
  - Pressure of speech
  - Delusion of grandeur
27. Flight of idea is seen in:
- Mania
  - Schizophrenia
  - Depression
  - Delirium
28. Kallu a 22 year old male suffers from decreased sleep, increased sexual activity, excitement and spending excessive money for last 8 days. The diagnosis is:
- Confusion
  - Disorientation
  - Hyperactivity
  - Loss of memory
29. All of the following are included in diagnosis of Bipolar disorder except:
- Mania alone
  - Depression alone
  - Mania and depression
  - Mania and anxiety
30. Bipolar II disorder includes
- Cyclothymic disorder
  - Dysthemia
  - Single manic episode
  - Major depression & hypomania
31. The period of normalcy is seen between two psychosis. The diagnosis is:
- Schizophrenia
  - Manic Depression Psychosis (MDP)
  - Alcoholism
  - Depression
32. Chromosome associated with bipolar disease
- Chromosome 16
  - Chromosome 13
  - Chromosome 18
  - Chromosome 11
33. True about bipolar disorder type II
- Recurrent depression
  - Repetitive depression & mania
  - Repetitive mania & hypomania
  - Repetitive depression & hypomanic
34. Drug not used in prophylaxis of MDP
- Haloperidol
  - Lithium
  - Carbamazepine
  - Valproate
35. A 42 year old man with a past history of a manic episode presents with an illness of 1 month duration characterized by depressed mood, anhedonia and profound psychomotor retardation. The most appropriate management strategy is prescribing a combination of:

- a. Antipsychotics and antidepressants  
b. Antidepressants and mood stabilizers  
c. Antipsychotics and mood stabilizers  
d. Antidepressants and benzodiazepines
36. Patient feels that he has committed sins through out life, he contemplated abt suicide but has not thought how to do it, he also consulted his spiritual guru  
a. Further session with guru  
b. Anti depressant with anti psychotics  
c. Anti depressant and behavior therapy  
d. Anti Psychotics alone
37. HI AA is a metabolite of:  
a. Serotonin  
b. Dopamine  
c. Epinephrine  
d. Histamine
38. A patient on antidepressant therapy developed sudden hypertension on consuming cheese. The antidepressant is possibly:  
a. Amitryptiline  
b. Tranylcypromine  
c. Fluoxetine  
d. Sertraline
39. Tricyclic antidepressants have all of the following actions except:  
a. Anti cholinergic action  
b. Anti MAOI action  
c. Blocks 5 HT or NE reuptake  
d. Causes sedation
40. A patient was treated with Amytryptiline for depression developed urinary retention, Constipation & blurring of vision. Most likely cause is:  
a. Symptoms of depression  
b. Anti cholinergic side effects  
c. Depression medicamentosa  
d. Any of above
41. A patient of t/t for psychiatric disorder takes overdose of a drug, develops bradycardiac, hypotension, decreased sweating and salivation. The Likely drug is:  
a. Amitryptiline  
b. Lithium  
c. Selegiline  
d. Amphetamine
42. Tricyclic Anti depressant are contraindicated in:  
a. Glucoma  
b. Brain Tumor  
c. Bronchial Asthma  
d. Hypertension
43. A 60 year old male comes to casualty with acute retention of urine since 12 hours. On examination there was distended bladder. His son gives a history of taking some drug by the patient. Since 2 days as he is suffering from depression. The most likely drug is:  
a. CPZ  
b. Amitryptiline  
c. Haloperidol  
d. Pimozide
44. Non sedating Antidepressant is:  
a. Fluoxetine  
b. Minanserine  
c. Amoxapine  
d. Imipramine
45. Following drugs have abuse liability except:  
a. Buprenorphine  
b. Alprazolam  
c. Fluxetine  
d. Clozapine
46. Mode of action of fluoxetine  
a. GABA agonist  
b. GABA antagonis  
c. Inhibit uptake of 5 – HT  
d. Increase uptake of 5 – HT
47. Drug of choice for OCD  
a. Fluoxetine  
b. Imipramine  
c. Diazepam  
d. Haloperidol
48. The common side effect with fluoxetine therapy is:  
a. Seizure  
b. Nausea  
c. Hypotension  
d. Loose stools
49. Side effect of fluoxetine are A/E:  
a. Weight gain  
b. Sweating  
c. Urinary retention  
d. Diaarrhoea
50. All are Anti depressants except  
a. Trazodone  
b. Amitryptiline  
c. Fluoxetine  
d. Pimozide
51. Select the true statements:  
a. Imipramine is used in treatment of endogenous depression  
b. Fluxetine causes weight gain  
c. Thioridazine cause less anticholinergic effects  
d. BZD's have same abuse potential as barbiturates  
e. Codeine is an effective antiussive
52. Tianeptine acts by  
a. MAO inhibitor  
b. Serotonin uptake inhibitor  
c. Serotonin uptake Enhancer  
d. 5 – HT Against
53. Beta blockers are indicated in:

- a. Phobia 8. A
- b. Schizophrenia 9. B
- c. Anxiety 10. A
- d. Mania 11. D
- 54. All are Anxiolytic Except: 12. A,D
- a. Buspirone 13. A,B
- b. Fluoxetine 14. C
- c. Diazepam 15. A
- d. Haloperidol 16. B
- 55. Li is best used in: 17. B
- a. MDP – Bipolar 18. B
- b. MDP – Unipolar 19. A
- c. MDP – rapid cycles 20. D
- d. Depression 21. A
- 56. Lithium is treatment of choice for: 22. B
- a. Unipolar MDP 23. A,C
- b. Bipolar MDP porphylaxis 24. B,D
- c. Schizophrenia 25. D
- d. Acute mania 26. B
- 57. Prophylactic maintenance serum level of lithium is: 27. A
- a. 0.2 – 0.8 meq/L 28. A
- b. 0.8 – 1.2 meq/L 29. B
- c. 1.2 – 2.0 meq/L 30. D
- d. 2.0 – 2.5 meq/L 31. B
- 58. A patient is brought to the casualty in the state of altered sensorium, He was on Lithium treatment for affective disorder and has suffered through an attack of epileptic fits. On examination he has tremors, increased DTR's and incontinence of urine. He has also undergone an episode of severe gastroenteritis 2 days ago. The serum Lithium was found to be 1.95 meq/lit. The probable cause for his present state is: 32. C
- a. Lithium toxicity 33. D
- b. Dehydration 34. A
- c. Manic Episode 35. B
- d. Depressive Stupor 36. B
- 59. Disulfiram acts by: 37. A
- a. Inhibiting alcohol dehydrogenase 38. B
- b. Inhibiting Aldehyde Dehydrogenase 39. B
- c. Both 40. B
- d. None 41. A

**Answer Key**

- 1. C 52. C
- 2. A 53. C
- 3. C 54. D
- 4. B 55. A
- 5. C 56. B
- 6. B 57. B
- 7. B 58. A
- 59. B

# Anxiety Disorders

**ANXIETY DISORDERS**

1. ANXIETY is a normal phenomenon, Anxiety is the Commanest psychiatric symptom and Anxiety disorders are one of the commanest psychiatric disorders is general population. It is normal reaction & some amount of anxiety is required for performance however excess of anxiety will take away the performance. Various symptoms of anxiety are as below:

**A. Psychological**

1. Apprehension
2. Fears of impending disaster
3. Irritability
4. Depersonalization

**B. Somatic**

1. Tremor
2. Sweating
3. Palpitations
4. Chest pain
5. Breathlessness
6. Headache
7. Dizziness
8. Diarrhoea;
9. Frequency of micturition
10. Initial insomnia
11. Poor concentration

**Physical Illnesses Which MIMIC Anxiety Disorder**

- |                       |                                  |
|-----------------------|----------------------------------|
| 1. Hyperthyroidism    | 2. Pheochromocytoma              |
| 3. Hypoglycemia       | 4. Paroxysmal atrial arrhythmias |
| 5. Alcohol withdrawal | 6. Temporal lobe epilepsy        |

**Acute Anxiety attack** - is a anxiety symptoms in response to some internal / external stress. e.g. exams, Interview. Treatment of Acute Anxiety attack is benzodiazepine For performance Anxiety - when to perform on stage or just before examination - The drug of choice is B-Blocker i.e propranolol.

2. **Generalized Anxiety disorders** characterised by

- |                                  |   |          |
|----------------------------------|---|----------|
| - free - floating Anxiety        | } | x 6month |
| (Anxiety for each & every thing) |   |          |
| - Apprehensive thoughts          |   |          |
| - Motor tension                  |   |          |

Diagnostic Criteria for Generalized Anxiety Disorder

- A. Excessive anxiety and worry (apprehensive expectation), occurring more day than not for at least 6 months, about a number of events or activities (such as work or schools performance).
- B. The person finds it difficult to control the worry.
- C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms present for more days than not for the past 6 months): (1) restlessness or feeling keyed up or on edge; (2) being easily fatigued; (3) difficulty concentrating or mind going blank; (4) irritability; (5) muscle tension; (6) sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep).

Treatment: Benzodiazepine / SSRI / TCA / Buspirone (5 HT1a A partial agonist). All are first line drug of choice.

For acute Benzodiazepine management of GAD – Benzodiazepine

For long term managment of GAD - SSRI / TCA / Buspirone

**3. Panic Attack**

It is Sudden, Severe, Spontaneous attack of Anxiet, Building up in 10 minutes, Lasting for 1/2 hour with a feeling of impending doom that either he/she will die today or go crazy.

Treatment of choice of panic attack is - Benzodiazepines.

**Provocation of Panic Attacks Some Challenge Paradigms (Possible Mechanisms)**



1. Lactate (pH and pCO<sub>2</sub> changes)
2. Bicarbonate (pH and pCO<sub>2</sub> changes)
3. Hypercapnia with 5% or 35% CO<sub>2</sub> (pCO<sub>2</sub> changes)
4. Hyperventilation (pCO<sub>2</sub> changes)
5. Caffeine (Adenosine, benzodiazepine receptors)
6. Noradrenergic agents like isoprenaline and noradrenaline (NE)
7. Yohimbine (NE, 5-HT)
8. Tricyclic antidepressants (NE, 5-HT)
9. mCPP (5-HT receptor stimulation)
10. Benzodiazepine receptor agents flumazenil (antagonist)
11. Cholecystokinin (CNS/ peripheral action)
12. Hypoglycemia (Peripheral autonomic activation)
13. Cognitive (Catastrophic misinterpretation)
14. Clomipramine (5-HT)

**4. Panic Disorder:** (Episodic paroxysmal anxiety) - occurrence of at least 4 Panic attack per month is described as panic disorder.

Clinical features :

- 1) Recurrent attacks of severe anxiety.
  - 2) Autonomic symptoms – palpitation, choking sensation, dizziness etc.
  - 3) Fear of dying, losing control or going mad.
  - 4) Anticipatory anxiety ( ie persistent fear of having another attack)
- Duration of attack- last for minutes only, though sometimes longer.

T/t of panic disorder -:

- 1) SSRI: Sertraline (SSRI) Paroxetine (SSRI), Imipramine
- 5) Phobia:

Clinical features: Irrational Excessive of thing, not usually feared by others fear leading to conscious avoidance of the feared object, activity or situation. Presence of anxiety when exposed to the situation.

Certain age related phobias considered normal includes

- 3 years School phobia
- 5 years Darkness
- 8 years Animal
- 11 years Thanatophobia or fear of death

**Type Precipitation Situation**

Type	Precipitation Situation
Agoraphobia	- Fear of place from where easy escape is not possible. - Most common Q & most disabling - Only one or two persons are relied upon K\ a Phobia companions Q
Claustrophobia	- Fear of closed spaces Q
Acro\Aero-phobia	- Fear of high places Q
Algophobia	- Fear of pain Q
Xenophobia	- Fear of strangers Q
Zoo-phobia	- Fear of animals Q
Sito phobia	- Fear of eating
Thenato phobia	- Fear of death
Social phobia	- Fear of social activites interactions. Ex :Shy-Bladder : fear of ur inating in public lavatory Erythrophobia: fear of blushing.

**Types as in psychiatry diagnosis**

- a. Agoraphobia = fear of being in places away from the familiar setting of home. Includes fear of open spaces, public places, crowded places or any place from where there is no easy escape to a safe place. with panic attack, without panic attack It is usually associated with panic attack
- b. Social phobia = Fear of Negative evaluation by others Irrational fear of social interaction, avoidance of social situations. Fear of public performance, speaking to strangers, urinating in public lavatory etc.

- c. Specific Phobia / Isolated phobia = fear of specific object. Most common phobia eg. Acrophobia (heights)/ Claustrophobia (closed places) Algophobia (pain) / Xenophobia (strangers).

Treatment = Multimodal I) Behavior therapy ± pharmacotherapy (SSRI, Benzodiazepine)

Treatment of choice for phobia is Behavior therapy. & Drug of choice is SSRI.

- Variations Behaviour therapies are

1. Graded exposure - Gradual exposure to fearful stimulus in Gradeel manner.
2. Systematic desensitization - Person is made to relax and under relaxation he was asked to go in a stepwise manner from least feared to most feared situation. It can be done directly or in Imagination.
3. Flooding - Supra maximal exposure. The person is exposed & Extreme of feared situation.

**6. Obsessive – Compulsive disorder:**

Clinical Features: Repetitive thoughts, (doubts, images, words, ideas or phase ) which intrude forcibly into pt’s mind recognized as the individual’s own, Perceived as absurd as nonsensical, tries to resist but unable to do so: Resisted unsuccessfully by the individual Egodystonic ie. associated with anxiety or distress. Compulsions senseless repeated rituals eg. repeated hand washing, checkers

**OCD**

It is of two types

**OBSESSION, COMPULSION**

**OCD**

OBSESSION	COMPULSION
<ul style="list-style-type: none"> <li>• Recurrent &amp; persistent thought intrudes into conscious awareness</li> <li>• Recognized as one’s own idea but is Ego -alien.(foreign to one’s personality)</li> <li>• Attempts to ignore or suppress but is unable</li> </ul>	<ul style="list-style-type: none"> <li>• Irresistible respective behaviour</li> <li>• Act are aimed at preventing or reducing distress.</li> <li>• Failure to resist\ marked distress (unpleasant)</li> </ul>

Neurotransmitter involved: Serotonin

Defense mechanism = Isolation, undoing & reaction formation.

Types: Washers, (Most common) Checkers, Pure obsessions (no compulsions eg. Blasphemy, sexual obsessions, aggressive obsessions).

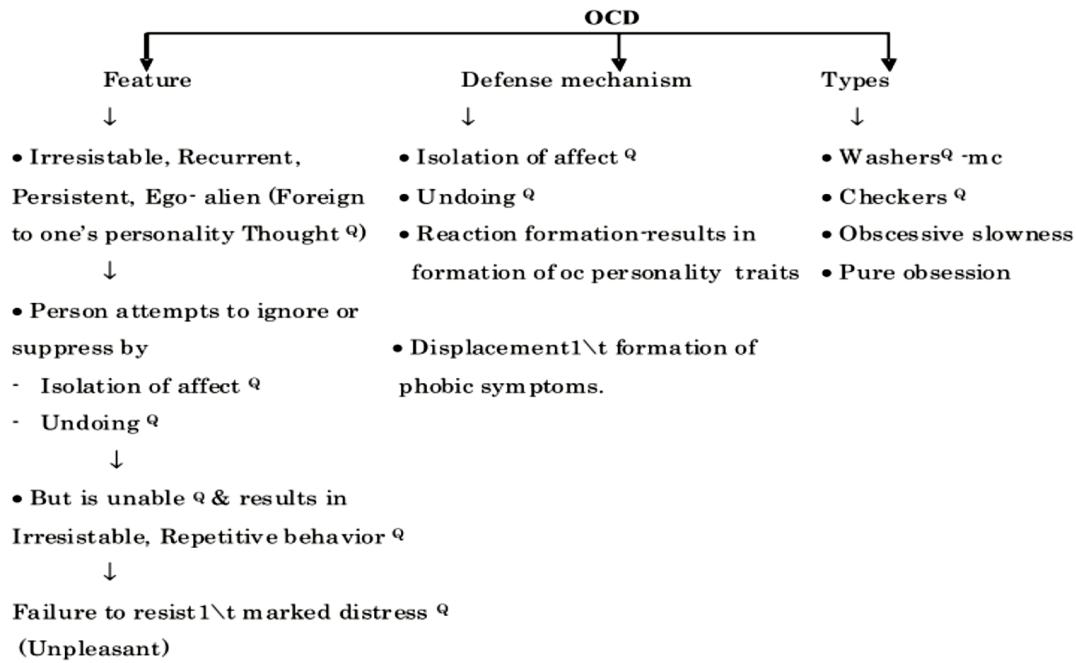
Primary Obsessive Slowness: obsessions with no anxiety; patient slow in all activities.

In clinical practice, one of the most useful scales is the Y-BOCS (Yale Brown Obsessive Compulsive Scale). It can be used to elicit the symptomatology and rate the severity of OCD.

The Y-BOCS classifies the symptoms and signs of OCD as follows:

1. Aggressive obsessions.
2. Contamination obsessions
3. Sexual obsessions.
4. Hoarding/Saving obsessions.
5. Religious/Scrupulous obsessions.
6. Obsession with need for symmetry or exactness.
7. Somatic obsessions.
8. Miscellaneous obsessions.
9. Cleaning/washing compulsions.
10. Checking compulsions.
11. Repeating rituals.
12. Counting compulsions.
13. Ordering/arranging compulsions.
14. Hoarding/collecting compulsions.

**OCD**



1. Treatment of choice of OCD - is Behavior therapy – Exposure and Response Prevention (ERP). In this the client is exposed to stimulus and response is prevented. Like some body suffering from repeated hand washing his hands are made dirty (Exposure) and he is not allowed to wash hands (Response prevention)
  - **Among the two, Improvement occur because of response prevention**, (as by this patient is habituated to the Anxiety).

The therapy for pure obsession is :-

- a. Thought stopping - Wherever you get such thought say loudly “ STOP “ or in your mind say “STOP’.
  - b. Thought flooding - Recording of all such thoughts and listening them for 4 hours/ day.
2. Best group of drug for treatment of OCD is SSRI.
  3. Otherwise best drug of choice of OCD is clomipramine.
  4. Best SSRI for treatment of OCD is Fluvoxamine (Not fluoxetine) it is 10 times more potent & 50 times more specific than any other SSRI for treatment of OCD.
  5. Best treatment is combining behaviour therapy and drug therapy.
  6. Treatment of Resistant OCD is -IV ( intravenous ) Clomipromine.

- rTms- Repeattive Transcranial Magnetic stimulation.
- DBS- Deep Brain stimulation.

In this electrode is placed directly on the Internal capsule through hole in skull.

- Psychosurgery- Cinglotomy.

**Etizolam** is a thienodiazepine drug which is abenzodiazepine analog. The etizolam molecule differs from a benzodiazepine in that the benzene ring has been replaced by athiophene ring. It possesses amnesic, anxiolytic, anticonvulsant, hypnotic, sedative and skeletal muscle relaxant properties.

**INDICATIONS**

- Short-term treatment of insomnia
- Short-term treatment of anxiety or panic attacks, if a benzodiazepine is required

**DOSAGE**

- For anxiety: 0.50–1 mg two or three times per day (maximum 3 mg per day)
- For insomnia: 1–2 mg before bedtime

A 1 mg dose of etizolam is approximately equivalent to that of 10 mg of diazepam, see List of benzodiazepines.

**SIDE EFFECTS:** Blepharospasms with long term use

**Very Rare:-** Erythema annulare centrifugum skin lesions

## MULTIPLE CHOICE QUESTIONS

1. Lack of insight is not a feature of:
  - a. Panic disorder
  - b. Schizophrenia
  - c. Mania
  - d. Reactive Psychosis
2. Baby 20 year old female complains of sudden onset palpitation and apprehension. She is sweating for you last 10 minutes and fears of impending death. Diagnosis is:
  - a. Hysteria
  - b. Generalized Anxiety Disorder
  - c. Cystic fibrosis
  - d. Panic Attack
3. Differential diagnosis of panic disorder are all except :-
  - a. Pheochromocytoma
  - b. Myocardial infarction
  - c. Mitral valve prolapse
  - d. Depression
4. Drug of choice for panic disorder
  - a. Fluoxetine
  - b. Lithium
  - c. Diazepam
  - d. Chlorpramazine
5. Phobia is
  - a. Psychosis
  - b. Anxiety
  - c. Fear of animal
  - d. Neurosis
6. A middle aged person reported to psychiatric OPD with the complaints of fear of leaving home, fear of traveling alone and fear of being in a crowd. He develops marked anxiety with palpitations a swelling if he is in these situations. He often avoids public transport to go his place of work.The most likely diagnosis is:
  - a. Generalised anxiety disorder
  - b. Schizophrenia
  - c. Personality disorder
  - d. Agoraphobia
7. A fifty year old male feels uncomfortable in using lift, being in crowded places and traveling. The most appropriate line of treatment is:
  - a. Counseling
  - b. Systematic desensitization
  - c. Exposure and response prevention
  - d. Covert sensitization
8. Definitive treatment of all types of phobias
  - a. Behaviour therapy
  - b. Social therapy
  - c. Avoidance
  - d. Drug therapy
9. A 35 year old man with an obsessive compulsive personality disorder is likely to exhibit all of the following features except:
  - a. Perfectionism interfering with performance
  - b. Compulsive checking behaviour
  - c. Preoccupation with rule
  - d. Indecisiveness
10. The features of OCD are A/E
  - a. Irrationale thought
  - b. Egosyntonic
  - c. Resisting the idea
  - d. Persistence of idea
11. Abnormal thought possession is found in
  - a. Organic Brain syndrome
  - b. Hysteria
  - c. Obsessive compulsive disorder
  - d. Neuroasthenia
12. A 15 year old boy feels that the dirt has hung onto him whenever he passes through the dirty street. This repetitive thought causes much distress and anxiety. He knows that there is actually no such thing after he has cleaned once but he is not satisfied and is compelled to think so. This has led to social withdrawal. He spends much of his time thinking about the dirt and contamination. This has affected his studies also. The most likely diagnosis is:
  - a. Obsessive compulsive disorder
  - b. Conduct disorder
  - c. Agoraphobia
  - d. Adjustment disorder
13. True about obsessive compulsive disorder is/are:
  - a. Irresistible desire to do a thing repeatedly
  - b. Is a dissociative disorder
  - c. Denial is the defense mechanism against O.C.D
  - d. Patient is conscious about the disorder
14. Which of the following statements differentiates the obsessional idea from delusions
  - a. The idea is not a conventional belief
  - b. The idea is held inspite of contrary evidence
  - c. The idea is regarded as senseless by patient
  - d. The idea is held on inadequate ground
15. For severe intractable obsessional neurosis the psychosurgery of choice is
  - a. Bifrontaltractotomy
  - b. Cingulotomy
  - c. Amygdalotomy
  - d. Temporallobelesion

**Answer Key**

1. A
2. D
3. D
4. A
5. D
6. D
7. B
8. A
9. B
10. B
11. C
12. A
13. A, D
14. C
15. B

## Neurotic, Stress Related & Somatiform Disorders

The term neurosis is defined as:

1. The presence of a symptom or group of symptoms which cause subjective distress to the patient.
2. The symptom is recognized as undesirable (i.e. insight is present).
3. The personality and behavior are relatively preserved and not usually grossly disturbed.
4. The contact with reality is preserved.
5. There is an absence of organic causative factors.

### 1. Dissociative (conversion) Disorders, Hysteria

#### Clinical features:

Conversion disorder is characterised by the following clinical features :-

1. Presence of symptoms or deficits affecting motor or sensory function suggesting a medical or neurological disorder.
2. Sudden onset.
3. Development of symptoms usually in the presence of a significant psychosocial stressor (s)
4. A clear temporal relationship between stressor & development or exacerbation of symptoms.
5. Detailed physical examination do not reveal any abnormality that can explain the symptoms adequately.

Astasia – abasia (Blocq's disease)

Inability to walk or stand in a normal manner. The Gait is bizarre and is not suggestive of any organic lesion.

- a. Specific clinical features.
- b. No evidence of a physical disorder.
- c. Evidence for psychological causation ie temporal association to stress.
- d. La bella indifference: no regard for symptoms though look severe

Labella - is a french word meaning emotion.

i.e emotions are not matching with the loss.

e.g somebody smilingly coming to doctor with Complaints of Blindness.

Common Presentations of Conversion Disorder

Gait disturbance Pseudoseizures Loss of function in limbs

Aphonia Sensory loss Blindness

- I. **Dissociative Trans & Possession** — as if the person has been taken over by spirit, deity etc.
- II. **Dissociative anaesthesia and sensory loss** - patient presents with sensory loss which is not substantiated on physical examination.
- III. **Dissociative motor disorder**— loss of ability to move limb / in coordination etc.
- IV. **Dissociative convulsions:** in presence of others, no injuries/frothing incontinence, last more than 1 min, not stereotyped, never in sleep.

There are 2 types of Gains described for Dissociative Disorder

1. **Primary Gain** - Relief from Unconscious signal Anxiety.
2. **Secondary Gain** - Observable Gain or some benefit is called as secondary Gain.

TABLE : DISSOCIATIVE CONVULSIONS AND EPILEPTIC SEIZURES

Clinical Points	Epileptic Seizures	Dissociative Convulsions ('Hysterical Fits')
1. Attack pattern	Stereotyped, known clinical pattern	Absence of any established clinical patterns. Purposive body movements occur.
2. Place of occurrence	Any where	Usually indoors or at safe places Variable.
3. Warning	Both prodrome and aura are stereotyped	Variable
4. Time of day	Anytime Can occur during Sleep	Never occur during sleep
5. Tongue bite	Usually present	Usually absent cheek and lip bite may be present
6. Incontinence of urine and feces	Can occur	Very rare
7. Injury	Can occur	Very rare. If occur, it is minor or may be accidental
8. Speech	No verbalization during the seizure	Verbalization may occur during the fit.
9. Duration	Usually about 30-70 sec. (Short)	20-800 sec (prolonged)
10. Head turning	Unilateral	Side to side turning
11. Eye gaze	Staring, if eyes are open Complete	Avoidant gaze
12. Amnesia	complete	Partial
13. Neurological	Present, e.g. up going planters	Absent
14. Post-ictal confusion	present	Absent
15. Stress	Present in 25%	Present much more often
16. EEG- Inter-ictal -Ictal	Usually abnormal Abnormal	Usually normal Normal
17. Serum prolactin	Increased in post-ictal period (15-20 minutes after seizure; returns back to normal in 1hour)	Usually normal

2. SPECIAL TYPES OF DISSOCIATIVE DISORDER

1. **Dissociative amnesia** — loss of memory is too extensive to be explained by ordinary forgetfulness. Types of Dissociative Amnesia

**i. Circumscribed Amnesia (commonest type):**

There is an inability to recall all the personal events during circumscribed period of time, usually corresponding with the presence of the stressor.

**ii. Selective Amnesia (less common):**

This is similar to circumscribed amnesia but there is an inability to recall only some selective personal events during that period while some other events during the same period may be recalled.

**iii. Continuous Amnesia (rare):**

In this type, there is an inability to recall all personal events following the stressful event, till the present time.

**iv. Generalized Amnesia (very rare):**

In this type, there is an inability to recall the personal events of the whole life, in the face of a stressful life event.

2. **Dissociative fugue** — This is characterised by episodes of wandering away usually away from home. During this, person usually adopts a new identity with complete amnesia for the earlier life. The characteristic feature is the assumption of a purposeful new identity, with absence of awareness of amnesia. Dissociative amnesia + purposeful travel beyond the usual everyday range + maintenance of basic self care & other functions.
3. **Multiple personality disorders/dissociative identity disorder.** Person has 2 or more Personality and is not aware of this.
4. **Ganser syndrome**— Approximate answers, for simple question, like 2+2 he would answer 5 or asking colour of white board person tells it to be yellow. Also in German language called as '**Vorbeireden**'
5. **Depersonalization** — "As If" phenomenon about the self. Person feels 'as if' & something in him has changed.
6. **Derealization** — 'As if' phenomenon about the environment. 'As if' things in surrounding have changed. Treatment: Insight oriented psychotherapy with abreaction / behavior therapy.

**3. Somatoform disorders**

In this category the patients presents with somatic symptoms for which there is no existing signs or no existing pathology.

**i) Somatization disorders** – (earlier called as **Briquet's syndrome**)

In this disorder the patients presents with multiple somatic complaints at least 6+ 1 (pseudo neurological) of 4 systems of the body for 2 years.

- In Somatization there is a Doctor Shopping, Paehint had multiple Investigations,

But TO know the diagnosis "

- ii) Hypochondriasis** - Normal physiological or minimal pathological symptoms are taken as a sign of deadly disease. eg. Person hearing 1-2 bowel sound /day (which is normal) with distension & minimal constipation believes that he is having carcinoma colon. In Hypochondriasis - There is Doctor Shopping, Paehint had multiple Investigahous, But TO Confirm the diagnosis "

**iii) Body dysmorphic disorder:**

There is persistent "doubt" about the appearance of body Person "doubts" that the nose is "ugly", "too long". In body dysmorphic delusion (a type of somatic delusion), Person has "fixed" belief that nose is ugly and hiding nose & requesting surgeons to operate the nose, is present. But the difference is very minute between the two disorders so question should be read very carefully. Body Dysmorphic Disorder is very closs to Obsessive Compulsive disorder became in this also there is repeatitive doubts, Infact, Body Dysmorphic Disorder is a spectrum Disorder of OCD.

**4. FACTITIOUS DISORDER**

**Munchausen's syndrome or Munchausen's syndrome by proxy** (also known variously as hospital addiction, hospital hoboos, or profes-sional patients) is used for those patients who repeatedly simulate or fake diseases for the sole purpose of obtaining medical attention. There is no other recognisable motive (hence, it is different from malingering).

The patients distort their clinical histories, laboratory tests' reports, and even facts about other aspects of their lives (pseudologiafantastica). Sometimes, they distort physical signs by self-inflicted injuries and secondary infect ions. Drug abuse, especially abuse of prescription drugs, is common.

Evidence of earlier treatment, usually surgical procedures, is often available in the form of multiple scars (e.g. "grid-iron abdomen"). These patients are often manipulative and convincingly tell lies, create problems in the inpatient setting and often leave against medical advice, usually after the surgical procedure has been performed. In this gain is primary gain

**GRIEF**

Normal emotionl response to the loss of a loved object. There are three phases of grief.

1. Shock: for few hours to weeks, numbness, denial, disbelief
2. Preoccupation with the deceased: anger, sadness, thoughts of dead, identification with dead; 4-6 weeks
3. Resolution: forming new relations, regaining interest in activities



Pathological Grief - It is a deviation from normal Grief.  
 i.e. either the Grief is - **Delayed** - No Grief for 15 days  
 - **Prolonged** — Grief for > 6 months

There could be complication in the Grief

1. It is need to differentiate from normal Grief.
2. Psychosis — started heaving voices or seeing somebody.

Grief	Depression
<ul style="list-style-type: none"> <li>- Guilt about dead person, survivor guilt, not able to take proper case.</li> <li>- Wish as he would be dead,</li> <li>- Minimal worth less ness</li> <li>- Psychomotor retardation</li> <li>- Minimal or no functional impairment</li> </ul>	<ul style="list-style-type: none"> <li>- Guilt about other things.</li> <li>- Thoughts of death, other than survivors feeling.</li> <li>- Severe worth less ness.</li> <li>- Marked psychomotor retardation</li> <li>- Functional impairment.</li> </ul>

**IMPULSE CONTROL DISORDERS**

Characterized by:-

1. Failure to resist an impulse or drive to perform some action that is harmful to themselves or others. They may or may not consciously resist or plan the act.
2. Before committing the act, they feel increase in tension or arousal
3. While committing the act they feel pleasure, gratification or release.

Types

**Kleptomania:** Recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value.

**Pyromania:** Deliberate and purposeful fire setting on more than one occasion.

**Trichotillomania:** Recurrent pulling out of ones hair resulting in noticeable hair loss. Pharmacotherapy includes fluoxetine.

**Intermittent explosive disorder:** Several discrete episodes of failure to resist aggressive impulse that result in serious assaultive acts of destruction or property.

**Pathological Gambling:** Persistent and recurrent maladaptive behavior indicated by for e.g. preoccupation with gambling, need to gamble with increasing amount of money, chasing ones losses etc.

Neurasthenia:

It is of two type.

In one type, the main feature is a complaint of increased fatigue after mental effort, often associated with some decrease in occupational performance or coping efficiency in daily task.

The mental fatigability is typically decreased as an unpleasant intrusion of distracting association or recollection, difficulty in concentrating and generally in efficient thinking. In the other type, the emphasis is no feelings of bodily or physical weakness and exhaustion after only minimal effort, accompanied by a feeling of muscular aches and pains and inability to relax. In both types, a variety of other unpleasant physical feelings, such as dizziness, tension headaches, and a sense of general instability, are common. Worry about decreasing mental and bodily well being.

REACTION TO SEVERE, STRESS, AND ADJUSTMENT DISORDERS

**ACUTE STRESS DISORDER AND PTSD**

Severe anxiety symptoms following a life-threatening event that caused feelings of fear, helplessness and horror

If > 2 days but < 1 month— acute stress disorder

If >1 month—PTSD

Key symptoms-

- (1) Re-experiencing the traumatic event: nightmares, flashbacks or intrusive recollections.
- (2) Avoidance of stimuli associated with the trauma.
- (3) Autonomic arousal, anxiety, sleep disturbance.

This category differs from others in that it includes disorders identifiable not only on grounds of symptomatology and course but also on the basis of one or other of two causative influences – an exceptionally stressful life event producing an acute stress reaction, or a significant life change leading to continued unpleasant circumstances that result in an adjustment disorder.

**Acute Stress Reaction.**

A transient disorder of significant severity which develops in an individual without any other apparent mental disorder in response to exceptional physical and/or mental stress and which usually subsides within hours or days. The stressor may be an overwhelming traumatic experiences involving serious threat to the security or physical integrity of the individual or of a loved person(s) (e.g. natural catastrophe, accident, battle, criminal assault rape), of an unusually sudden and threatening change in the social position and/ or network of the individual, such as multiple bereavement or domestic fire. The risk of this disorder developing is increased if physical exhaustion or organic factors (e.g. in the elderly) are also present. Diagnostic guidelines.

There must be an immediate and clear temporal connection between the impact of an exceptional stressor and the onset of symptoms; onset is usually within a few minutes if not immediate. In addition, the symptoms:

- a. Show a mixed and usually changing picture; in addition to the initial state of “daze” depression, anxiety, anger, despair, overactivity, and withdrawal may all be seen, but no one types of symptom predominates for long;
- b. Resolve rapidly (within a few hours at the most) in those cases where removal from the stressful environment is possible; in cases where the stress continues or cannot by its nature be reversed, the symptoms usually begin to diminish after 24-48 hours and are usually minimal after about 3 days.

**Post-traumatic stress disorder**

This arises as a delayed and/or protracted response to a stressful event or situation (either short or long lasting) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone (e.g. natural or man-made disaster, combat, serious accident, witnessing the violent death of other, of being the victim of torture, terrorism rape or other crime).

Typical symptoms include episodes of repeated reliving of the trauma in intrusive memories (“flashbacks”) or dreams. The persisting background of a sense of numbness and emotional blunting detachment from other people unresponsiveness to surroundings anhedonia and avoidance of activeness and situations reminiscent of the trauma. Commonly there is fear and avoidance of cues that remind the sufferer of the original trauma. There is usually state of autonomic hyperarousal with hyper vigilance an enhanced startle reaction and insomnia.

Anxiety and depression are commonly associated with the above symptoms and signs, and suicidal ideation is not infrequent. Excessive use of alcohol or drugs may be a complicating factors.

There onset follows te trauma with a latency period which may range from a few weeks to months (but rarely exceeds 6 months).

The course is fluctuating but recovery can be expected in the majority of cases. In a small proportion of patients the condition may show a chronic course over many years and a, transition to an enduring personality change. Treatment of Choice is Behaviour therapy. and Drug of choice is SSRI. r-tms is also now approved by FDA for treatment of PTSD

**ADJUSTMENT DISORDERS**

Adjustment disorders are one of the commoner psychiatric disorders seen in the clinical practice. They are most frequently seen in adolescents and women. Although adjustment disorder is often precipitated by one or more stressors, it usually represents a maladaptive response to the stressful life event(s).

In ICD-10, this disorder is characterised by those disorders which occur within 1 month of a significant life change (stressor). This disorder usually occurs in those individuals who are vulnerable due to poor coping skills or personality factors. It is assumed that the disorder would not have arisen in the absence of the stressor(s). The duration of the disorder is usually less than 6 months, except in the case of prolonged depressive reaction.

The various subtypes include brief or prolonged depressive reaction, mixed anxiety and depressive reaction, and adjustment disorder with predominant disturbance of other emotions and/or predominant disturbance of conduct.

Most patients recover within a period of six months.

### **Treatment**

1. Supportive psychotherapy remains the treatment of choice.
2. Crisis intervention is useful in some patients, by helping to quickly resolve the stressful life situation which has led to the onset of adjustment disorder.
3. Stress management training and Coping skills training.
4. Drug treatment may be needed in some patients for the management of anxiety (benzodiazepines) and/or depressive symptoms (antidepressants).

## MULTIPLE CHOICE QUESTIONS

1. A man coming from mountain whose wife died 6 months prior says that his wife appeared to him and asked him to join her. The diagnosis is
  - a. Normal grief
  - b. Grief psychosis
  - c. Bereavement reaction
  - d. Supernatural phenomenon
2. An elderly house wife lost her husband who died suddenly of Myocardial infarction couple of years ago. They had been staying alone for almost a decade with infrequent visits from her son and grandchildren. About a week after the death she heard his voice clearly talking to her as he would in a routine manner from the next room. She went to check but saw nothing. Subsequently she often heard his voice conversing with her and she would also discuss of mood when she was preoccupied with his thought. She should be treated with:
  - a. Clomipramine
  - b. Alprazolam
  - c. Electroconvulsive therapy
  - d. Haloperidol
3. Which of the following is NOT a clinical feature of post traumatic stress disorder (PTSD)
  - a. Flashbacks
  - b. Hyperarousal
  - c. Hallucinations
  - d. Emotional numbing
4. A lady while driving a car meets with an accident She was admitted in an ICU for 6 months. After being discharged she often gets up in night and feels terrified She is a afraid to sit in a car again. The diagnosis is
  - a. Anxiety disorder
  - b. Phobia
  - c. Conversion disorder
  - d. Post Traumatic Stress Disorder
5. Three years back a woman suffered during an earthquake and she was successfully saved. After recovery she has nightmares about the episode and she also gets up in the night and feels terrified. The most probable diagnosis is:
  - a. Major depression
  - b. Post-traumatic stress disorder
  - c. Mania
  - d. Schizophrenia
6. Three years back a woman suffered during an earthquake and she was successfully saved. After recovery she has nightmares about the episode and she also gets up in the night and feels terrified. The most probable diagnosis is:
  - a. Major depression
  - b. Post-traumatic stress disorder
  - c. Mania
  - d. Schizophrenia
7. A 40-year old male is admitted with complaints of abdominal pain and headache. General physical examination revealed six scars on the abdomen from previous surgeries. He seems to maintain a sick role and seeks attention from the nurses. He demands multiple diagnostic tests including a liver biopsy. The treating team failed to diagnose any major physical illness in the patient. His mental status examination did not reveal any major psychopathology. One of the treating staff recognized him to have appeared in several other hospital with abdominal pain and some other vague complaints. He is most likely suffering from:
  - a. Schizophrenia
  - b. Malingering
  - c. Somatisation disorder
  - d. Factitious disorder
8. Maintaining sick role by any means is a characteristic feature of:
  - a. Hypochondriasis
  - b. Somatization disorder
  - c. Conversion disorder
  - d. Factitious disorder
9. A 28 year old male admitted in the hospital with a history of vague pains. His examination revealed many scars of previous surgeries. He was very curious about knowing his diagnosis and was persistently asking for various diagnostic procedures and biopsy. He gave the past history of gall stone & appendicitis pain diagnosed by previous doctors, but the history regarding this was inappropriate and seemed to be manipulative. There were no previous records suggesting this diagnosis. The probable diagnosis is:
  - a. Hypochondriasis
  - b. Somatization disorder
  - c. Conversion disorder
  - d. Factitious disorder
10. All are Dissociative Disorders except:
  - a. Multiple personality
  - b. Fugue
  - c. Amnesia
  - d. Deafness (Psychogenic)
11. Psychogenic amnesia is characterized by
  - a. Antegrade Amnesia
  - b. Retrograde Amnesia
  - c. Both with confabulation
  - d. Patchy impairment of Personal memories

12. A young female presented with halo's abdominal pain and amnesia she is likely to be suffering from
- Conversion disorder
  - Dissociative disorder
  - Depersonalization disorder
  - Mania
13. A person missing from home is found wandering purposefully. He is well groomed and denies of having any amnesia. Most likely diagnosis is-
- Dementia
  - Dissociative amnesia
  - Dissociative fugue
  - Schizophrenia
14. An 18 year old boy came to the Psychiatry OPD with a complaint of feeling changed from inside. He described himself as feeling strange as if he is different from his normal self. He was very tense and anxious yet could not point out the precise change in him. This phenomena is best called as:
- Delusional mood.
  - Depersonalization.
  - Autochthonous delusion.
  - Over valued idea.
15. A person has different multiple personality is suffering from:
- Mania
  - Personality disorder
  - Paranoid schizophrenia
  - Dissociative disorder
16. Regarding Ganser's syndrome true is
- Repeated lying
  - Approximate answers
  - Unconscious episodes
  - Malingering

**Answer Key**

- B
- D
- C
- D
- B
- B
- D
- D
- D
- D
- D
- B
- C
- B
- D
- B

## Personality Disorder

Personality is defined as the persistence and pervasive life style of an individual. No personality is good or bad but it is a excessive use of any personality trait which leads to dysfunction will called as personality disorders.

### Diagnostic guidelines

Conditions not directly attributable to gross brain damage or disease, or to another psychiatric disorder, meeting the following criteria:

- a. Markedly disharmonious attitudes and behaviour, involving usually several areas of functioning, e.g. affectivity, arousal, impulse control ways of perceiving and thinking, and style of relating to others;
- b. The abnormal behaviour pattern is enduring, of long standing and not limited to episodes of mental illness.
- c. The abnormal behaviour pattern is pervasive and clearly maladaptive to a broad range of personal and social situations;
- d. The above manifestations always appear during childhood or adolescence and continue into adulthood;
- e. The disorder leads to considerable personal distress but this may only become apparent late in its course
- f. The disorder is usually but not invariably, associated with significant problems in occupational and social performance.

Clear evidence is usually required of the presence of at least three of the traits or behaviours given in the clinical description. Personality disorder tends to appear in late childhood or adolescence and continues to be manifest into adulthood.

### PERSONALITY DISORDERS CLUSTERS (DSM-IV-TR)

#### 1. Cluster A (Odd and Eccentric)

Personality disorders, thought to be on a 'schizophrenic-continuum.

These are:

- I. Paranoid Personality Disorder
  - I. Schizoid Personality Disorder
  - II. Schizotypal Personality Disorder
2. Cluster B (Dramatic, Emotional and Erratic) Personality disorders, Thought to be on a 'psychopathic continuum. These are:
- I. Antisocial or Dissocial Personality Disorder
  - II. Histrionic Personality Disorder
  - III. Narcissistic Personality Disorder
  - IV. Borderline (Emotionally Unstable) Personality Disorder
3. Cluster C (Anxious and Fearful) Personality disorders, characterized by 'introversion'. These are:
- I. Anxious (Avoidant) Personality Disorder
  - II. Dependent Personality Disorder
  - III. Obsessive-Compulsive (Anankastic) Personality Disorder

#### Cluster A

1) Paranoid personality disorder Personality disorder characterized by:

- a) Excessive sensitiveness to setbacks and rebuffs;
- b) Tendency to bear grudges persistently, -i.e. refusal ,to forgive insults and injuries or slights.
- c) Suspiciousness and a pervasive tendency to distort experience by misconstruing the neutral or friendly act of others as hostile or contemptuous
- d) Recurrent suspicions, without justification, regarding sexual fidelity of spouse or sexual partner;

Treatment is 1. Individual Psychotherapy

2. Supportive Psychotherapy

2. Schizoid personality' disorder

Personality disorder meeting the following description:

- a) Few, if any, activities, provide pleasure;
- b) Emotional coldness, detachment or flattened affectivity;
- c) Limited capacity to express either warm, tender feelings or anger towards others;
- d) Apparent indifference to either praise or criticism;
- e) Almost invariable preference for solitary activities-'
- f) Excessive preoccupation with fantasy and introspection;

Treatment is

1. Individual Psychotherapy
2. Supportive Psychotherapy
3. Gradual involvement in group Psychotherapy
- 3) Schizotypal: Characterised by odd and eccentric behaviour & poor rapport with others
  - a. Magical thinking (thinking has power) – Merely by thinking, action would happen.
  - b. Suspiciousness or paranoid ideas
  - c. Obsessive ruminations without inner resistance, often with dysmorphophobia, sexual or aggressive contents.
  - d. Occasional transient quasi-psychotic episodes
- 4) **Narcissistic PD:**
  - a. Grandiose sense of self-importance,
  - b. Preoccupation with fantasies of unlimited success, power / intellectual brilliance,
  - c. Crave attention from other people but show few warm feelings in return,
  - d. Lack of empathy with others,
  - e. Shaky self esteem, underlying sense of Inferiority

Drug of choice - High dose SSRI

#### 5. **Dissocial (Antisocial) personality disorder**

Personality disorder, usually coming to attention because of a gross disparity between behaviour and the prevailing social norms, and characterized by:

- a. Callous unconcern for the feelings of others;
- b. Gross and persistent attitude of irresponsibility and disregard for social norms rules.
- c. Very low tolerance to frustration and a low threshold for discharge of aggression, including violence.
- d. Incapacity to experience guilt and to profit from experience, particularly punishment;

Conduct disorder during childhood and adolescence, though not invariably present, may further support the diagnosis.

Treatment - They often do not seek treatment.

Treatment is

1. Individual Psychotherapy
2. Supportive Psychotherapy

#### 6. **EMOTIONALLY UNSTABLE PERSONALITY DISORDER**

A personality disorder in which there is a marked tendency to act impulsively without consideration of the consequences, together with affective instability. The ability to plan ahead may be minimal and outbursts of intense anger may often lead to violence or behavioral explosions"; these are easily precipitated when impulsive acts are criticized or thwarted by others. Two variants of this personality disorder are specified, and both share this general theme of impulsiveness and lack of self-control.

#### **Impulsive type**

The predominant characteristics are emotional instability and lack of impulse control. Outbursts of violence or threatening behaviour are common, particularly in response to criticism by others.

#### **BORDERLINE TYPE**

- a) Several of the characteristics of emotional instability are present; in addition, the patient's own self image, aims, and internal preference (including sexual) are often unclear or disturbed.
- b) Usually chronic feelings of emptiness.
- c) Intense and unstable relationships may cause repeated emotional crises and may be associated with excessive efforts to avoid abandonment.
- d) Series of suicidal threats or acts of self-harm (although these may occur without obvious precipitants).
- e) Low frustration tolerance & poor coping skills.
- f) Impulsive behaviour.
- g) Micro psychotic episodes

Recurrent suicidal threats or behavior. It is the most common cause of suicidal attempts.

Treatment of choice

- Dialectic behavior therapy ( DBT ), & drug of choice for impulsivity is high dose of SSRI

#### 7. **Histrionic personality disorder**

Personality disorder characterized by:- It is the most common cause of suicidal attempts.

- a) Self-dramatization, theatricality, exaggerated expression of emotions;
- b) Suggestibility, easily influenced by others or by circumstances;
- c) Continual seeking for excitement appreciation by others, and activities in which the patient is the centre of attention
- d) Over concern with physical attractiveness.

Associated features may include egocentricity, self-indulgence, continuous longing for appreciation, feelings that are easily hurt, and persistent manipulative behaviour to achieve own needs.

#### 8. **Anankastic personality disorder** or (obsessive compulsive personality disorder)

Personality disorder characterized by:

- a) Feelings of excessive doubt and caution
- b) Preoccupation with details, rules, lists, order, organization or schedule;
- c) Perfectionism that interferes with task completion;
- d) Excessive conscientiousness, scrupulousness, and undue preoccupation with productivity to the exclusion of pleasure and interpersonal relationships.
- e) Excessive pedantry and adherence to social conventions, bound to rules & regulations
- f) Rigidity and stubbornness;

No increased risk of OCD in future, but there is a risk of depression in future.

#### 9. **Anxious (Avoidant) personality disorder**

Personality disorder characterized by:-

- a. Persistent and pervasive feelings of tension and apprehension;
- b. Belief that one is socially inept, personally unappealing or inferior to others;
- c. Unwillingness to become involved with people unless certain of being liked;
- d. Avoidance of social or occupational activities that involve significant interpersonal contact because of fear of criticism disapproval or rejection.

#### 10. **Dependent personality disorder**

Personality disorder characterized by;

- a. Encouraging or allowing others to make most of one's important life decision;
  - b. Subordination of one's own needs to those of others on whom one is dependent, and undue compliance with their wishes;
  - c. Unwillingness to make even reasonable demands on the people one depends on;
  - d. Feeling uncomfortable or helpless when alone, because of exaggerated fears of inability to care for oneself;
  - e. Preoccupation with fears of being abandoned by a person with whom one has a close relationship and of being left to care for oneself.
- ⇒ Treatment for all personality disorders is usually not sought, and even if started, not continued for long time.
- ⇒ Comprised of Individual psychotherapy, Group psychotherapy, Behaviour therapy and cognitive - Behaviour Therapy



**MULTIPLE CHOICE QUESTIONS**

1. True about personality disorders (PD)
  - a. Typically onset at early childhood & adolescent
  - b. Matured around age 30-40 yrs
  - c. Egodystonic
  - d. Dramatic, emotional and erratic behaviour in paranoid PD
  - e. Pervasive and maladaptive behavior
2. A person has poor performance in front of his seniors in public place, a lecture, avoids going to parties. The diagnosis is:
  - a. Panic disorder
  - b. Schizophrenia
  - c. Social phobia
  - d. Avoidant Personality
3. A person having the habit of repeated self inflicted injuries, what is the type of personality
  - a. Borderline personality disorder
  - b. Schizoid personality disorder
  - c. Histrionic personality disorder
  - d. Narcissistic personality disorder
4. Characteristic feature of Schizoid personality is
  - a. Conversion reaction
  - b. Not concerned with disease
  - c. Checks details of all things
  - d. Emotional coldness
5. Antisocial personality is seen with:
  - a. Drug abuse
  - b. Paranoid schizophrenia
  - c. OCN
  - d. None
6. A 16 year old girl was brought to the psychiatric emergency after she slashed her wrist in an attempt to commit suicide. On enquiry her father revealed that she had made several such attempts of wrist slashing in the past, mostly in response to trivial fights in her house. Further she had marked fluctuations in her mood with a pervasive pattern of unable interpersonal relationship. The most probable diagnosis is:
  - a. Borderline personality disorder
  - b. Major depression
  - c. Histrionic personality disorder
  - d. Adjustment disorder
7. A female presents with the history of slashed wrists and attempted suicide, now presents with similar history. The diagnosis is:
  - a. Borderline personality
  - b. OCD
  - c. Conversion Reaction
  - d. Histrionic Personality
8. Which of them is not a personality trait rather disorder?
  - a. Sensation – seeking
  - b. Neuroticism
  - c. Pleasure
  - d. Problem solving

**Answer Key**

1. a
2. c
3. a
4. d
5. a
6. a
7. a
8. d

## Miscellaneous

### EATING DISORDERS

Anorexia Nervosa: More common in females

Clinical features: Failure to maintain a normal body weight; weight less than 85% of expected weight (Body mass index < 17.5)

Fear and preoccupation with gaining weight,

Unrealistic self evaluation as overweight (body image distortion)

Amenorrhea for 3 cycles.

Diagnostic Features of Anorexia Nervosa

1. Refusal to maintain body weight at or above a minimally normal weight for age and height. (This includes a failure to achieve weight gain expected during a period of growth leading to an abnormally low body weight)
  - Weight loss of at least 15% of original body weight (or weight <15% below norm for age and height)
  - Avoidance of high calorie foods
2. Intense fear of weight gain or becoming fat.
3. Distortion of body image (e.g., feeling fat despite an objectively low weight or minimizing the seriousness of low weight).
4. Amenorrhea for at least 3 Months. (This criterion is met if menstrual period occur only following hormone- e.g., estrogen-administration.)

**Complications:** hypokalemia, osteoporosis, CHF

Treatment - Cognitive Behavioral therapy, Family therapy

**Prognosis:** Good if young age of onset, less hospitalizations, no bulimic episodes

**Type:-** It is of two types :

Restricting type – does not regularly engage oneself in binge eating or purging behavior .

Binge eating / purging type

Death may be due to

Hypokalemia, dehydration, CCF (Anemia)

Good prognosis - Low no. of hospitalization

- Younger age
- No bulimic episodes

**Treatment:**

Cyproheptadine - 12 – 32 mg/day with improvement in wt and elevation of mood.

Antidepressant (Fluoxetine, Tricyclic antidepressants have been extensively used but with little benefit.)

Bulimia Nervosa:

**Clinical features:**

1. Preoccupation with the food.
2. Recurrent episodes of overeating.
3. A sense of lack of control over eating.
4. A sense of compulsion to eat.
5. Attempt to counteract the fattening effect of food by—self induced vomiting, purging, alternate periods of starvation, exercise.
5. A self perception of being too fat

Diagnostic Features of Bulimia Nervosa

1. Recurrent episodes of binge eating, which is characterized by the consumption of a large amount of food in a short period of time and a feeling that the eating is out of control.
2. Recurrent inappropriate behaviour to compensate for the binge eating, such as self induced vomiting.
3. The occurrence of both the binge eating and the inappropriate compensatory behavior at least twice weekly, on average, for 3 months.
4. Over concern with body shape and weight.

Treatment: Cognitive and behavior therapy

Fluoxetine, imipramine, and MAOI all known to decrease the binge eating as well as taking care of symptoms of depression, Non-pharmacological methods Include psychoeducation, self monitoring, counseling, restricting thoughts, altering thoughts of body image etc.

Common Characteristics of Anorexia Nervosa and Bulimia Nervosa

	Anorexia Nervosa	Bulimia Nervosa
<b>CLINICAL CHARACTERISTICS</b>		
Onset	Mid-adolescence	Late adolescence/early adulthood
Female: male	10:1	10:1
Prevalence in women	0.5%	1-3%
Weight	Markedly decreased	Usually normally
Menstruation	Absent	Usually normal
Binge eating	25-50%	Required for diagnosis'
Mortality	-5% per decade	Low
<b>PHYSICAL AND LABORATORY FINDINGS</b>		
Skin/extremities	Lanugo	
	Acrocyanosis	
	Edema	
	Bradycardia	
	Hypotension	
Cardiovascular	Salivary gland enlargement	Salivary gland enlargement
	Slow gastric emptying	Dental erosion
	Constipation	
	Elevated liver enzymes	
Hematopoietic	Normochromic, normocytic anemia	
	Leukopenia	
Fluid/Electrolyte	Increased BUN, creatine	Hypokalemia
	Hyponatremia	Hypochloremia, Alkalosis
Endocrine	Hypoglycemia	
	Low estrogen or testosterone	
	Low LH and FSH	
	Low - normals, Normal TSH	
	Increased cortisol, Bone Osteopenia	

**SLEEP DISORDERS**

**PHYSIOLOGY OF SLEEP**

Sleep pattern are clinically described by sleep architecture, which is recorded by polysomnography. EEG, Electro-oculogram (EEG), and surface electromyogram are monitored here. Polysomnography pattern divides two types of sleep- REM and NREM.

**Stages of sleep**

(Stage 0) Wakefulness EEG shows low voltage fast waves, with mix of alpha and beta waves.

Eyes closed – alpha waves-

NREM (non rapid eye movement sleep ) – S sleep (synchronized sleep)

NREM

Stage 1 Absence of waves, theta waves appear (transition between wake fulness & sleep)

Stage 2 Sleep spindles – 13-15/sec (With background of theta-wave) K Complexes

Stage 3 Delta waves < 50%

Stage 4 Delta waves >50%

Normally after 90 min. follows REM sleep

REM- D or desynchronized sleep or paradoxical sleep (This is the stage wherein dreaming occurs) EEG show saw tooth wave pattern EMG activity is absent reflecting the complete brainstem mediated muscle atonia that is characteristic of that stage.

REM - is characterized by

Generalized muscular atony

Penile and clitoral enlargement .

Autonomic activity increases (Fluctuation, respiration heart rate gastric secretion).

4-5 REM / night

REM Latency (t ime between fail ing asleep and REM), decreased in Narcolepsy, Sleep Deprivation.

Long sleepers > 9 hours Short < 6 hours

Sleep Deprivation for > 100 hrs can lead to – Psychiatric symptoms specially psychosis.

Sleep cycle vanes with age.

Infancy – Newborns spend around 20 hours in sleep per day. NREM & sleep are not fully differentiated upto 3 to 6 months of age . Circadian rhythm develops over 3 year of life.

Adulthood – decrease in slow wave sleep.

Senescence – Decreased stage 3 and 4 of NREM and REM sleep. Increased stage of 1 and 2

NREM. Thus loss of diurnal sleep- wake pattern.

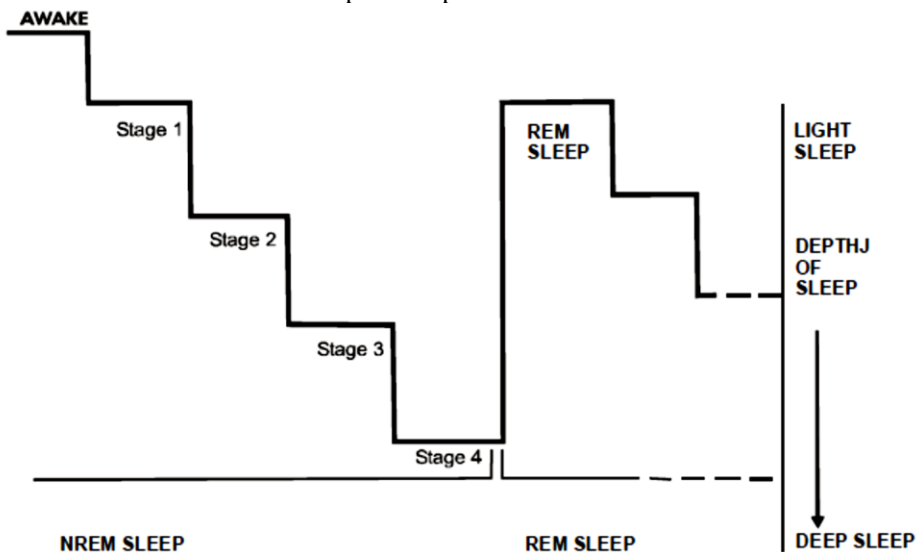


Fig: Stages of Sleep

Sleep investigation: Polysomnography that studies EEG, ECG, EMG, penile tumescence Disorders of sleep and wakefulness

1. Dyssomnias
2. Parasomias
3. Sleep disorders associated with medical or psychiatric disorders.

### 1. DYSSOMNIAS

- a. Insomnia – Complaint of inadequate sleep is prominent can be initial insomnia (difficult in initiating sleep) middle insomnia (difficulty in maintaining sleep), late insomnia or early morning insomnia seen in endogenous depression). Decrease in REM latency occurs in depression. REM latency is used experimentally as a marker to predict treatment response to antidepressants.

#### Dyssomnia associated with limb movements:

- Periodic movements is sleep Nocturnal myoclonus – Drug of choice is Benzodiazepines
- Restless leg syndrome – Ekbom syndrome, during waking – discomfort in leg muscles
- Drug of choice – Primpexol, Ropinorol, (Dopamine agonist)

b. Hypersomnia –

**i) Narcolepsy:**

Hallmark – Decreased REM latency (time between falling asleep and first REM, normal is 90 minutes)

Tetrad of Narcolepsy

1. Sleep attack (M/C)
2. Cataplexy – loss of muscle tone – Precipitated by emotion
3. Hypnagogic & Hypnopompic hallucinations
4. Sleep paralysis

Drug of choice - Modafinil

- Amphetamine - Methylphenidate
- Imipramine is drug of choice when cataplexy is a prominent symptom.

**ii) Sleep apnea**

Cessation of Airflow = 10 second; more than or equal to 30 episodes per night. Seen in

- Pickwickian syndrome, Obese

**iii) Kleine Levin Syndrome** : More common in males, in second decade

Hypersomnia, hyperphagia, hypersexuality

C. Disorder of Sleep - wake Schedule - These are characterised by a disturbance of timing of sleep, the various causes are

- i) Jet lag or rapid change of time zone.
- ii) Work-shift from day to night or vice-versa.
- iii) Unusual sleep phases.

**2. Parasomnias**

The term parasomnia refers to behavior disorder during sleep that are associated with brief or partial arousal but not with marked sleep disruption or impaired daytime alertness. The usual complaint is related to the behavior problem.

**STAGE IV DISORDERS:**

- a) Sleepwalking (Somnambulism)  
Automatic motor activities in unconscious state in state 3 and 4 NREM
- b) Sleep Terror or night terror or pavor nocturnus  
Usually in children, disturbance is in arousal as in sleepwalking. Occurs in NREM phase of sleep cycle.
- c) Sleep Bruxism
  - Involuntary forceful grinding of teeth during sleep that affects 10-20% of the population.
  - Typically starts at the age of 17-20 years. Treatment is for the risk of dental injury with rubber tooth guard or relaxation for stress management.
- d) Sleep Enuresis
  - Also called bedwetting. Considered normal before the age of 5 years. In older patients enuresis can be primary.

Secondary – bedwetting in those individuals who had been fully continent for 6 to 12 months.

**The important causes are:**

- I. Emotional disturbances.
- II. ii. Urinary tract infection
- III. Cauda equina lesions iv. Epilepsy
- IV. Sleep apnea.
- V. Urinary tract malformations

Pharmacotherapy includes imipramine (DOC) oxybutyline chloride and intranasal desmopressin in some cases.

- e) Sleep-talking(somniloquy):the person talks during stage4(and 3)of NREM sleep but does not remember anything about it on awakening . These disorder are often co-existent. Arousal is difficult and on waking up there is complete amnesia for the events.

**Treatment**

- Benzodiazepines suppress stage4 of NREM sleep, it provides relief in parasomnias.

- Other Sleep Disorder
- Nightmares occur during the REM-sleep. They are characterised by fearful dreams occurring most commonly in the last one-third of night sleep. The person wakes up very frightened and remembers the dream vividly.

**Classification of Hypno-sedative drugs**

1. Barbiturates
  - Long acting Short acting Ultra-short acting
  - Phenobarbitone Butobarbitone Thiopentone
  - Pentobarbitone Methohexitone
2. Benzodiazepines

Hypnotic	Antianxiety	Anticonvulsant
Diazepam	Diazepam	Diazepam
Flurazepam	Chlordiazepoxide	Lorazepam
Nitrazepam	Oxazepam	Clonazepam
Alprazolam	Lorazepam	Clobazam
Temazepam	Alprazolam	Triazolam

**Hypnotic Antianxiety Anticonvulsant**

3. Newer non benzodiazepine hypnotics  
Zopiclone Zolpidem Zaleplon  
Some pharmacokinetic and clinical features of benzodiazepines used as hypnotics

Drug t	1/2 (hr )		
<b>1. Long Acting</b>			
Flurazepam	50-100	Diazepam 30-60	Nitrazepam 30
<b>2. Short Acting</b>			
Alprazolam	12	Temazepam 8-12	Triazolam 2-3

**SEXUAL DISORDERS**

**TRANSEXUALISM:** Marked preoccupation with desire to have sex characteristics of opposite sex  
**TRANSVESTISM:** desire to wear clothes of opposite sex but no desire for sex change

**SEXUAL DYSFUNCTIONS:**

Disorders of sexual desire:

1. Decreased sexual desire : frigidity in females
2. Excessive sexual desire : Satyriasis in males, nymphomania in females

**Erectile dysfunction:**

**CAUSES OF MALE ERECTILE DISORDER/IMPOTENCE**

**I. Local Genital Pathology**

1. Priapism
2. Congenital malformations
3. Surgical procedures on pelvic region, e.g. perineal prostatectomy
4. Mumps
5. Elephantiasis
6. Hydrocele or varicocele.

**II. Endocrine Disorders**

1. Diabetes mellitus
2. Dysfunction of pituitary-ad renal-testis axis
3. Testicular atrophy, e.g. secondary to dystrophia myotonica, hemochromatosis, cirrhosis
4. Thyroid dysfunction.

**III. Neurological Disorders**

1. Autonomic neuropathy, e.g. in diabetes
2. Spinal cord lesions e.g. transverse mellitus myelitis
3. 3rd ventricle tumors
4. Brain damage, especially in temporal lobe
5. Multiple sclerosis.

**IV. Cardiovascular Disorders**

1. Leriche syndrome.
- V. Any Severe or Debilitating Systemic Illness
- VI. Alcohol And Drugs.
- VII. Psychogenic: anxiety /mood disorder; early morning erections preserved
- VIII. Drugs.

Drugs Causing Erectire Dysfuction

Drugs Causing Erectire Dysfuction

Classification	Drugs
Diuretics	Thiazides Spironolactone
Antihypertensives	Calcium channel blockers Methyldopa, Clonidine, Reserpine b-Blockers, Guanethidine
Cardiac/anti-hyperlipidemic	Digoxin, Gemfibrozil, Clofibrate
Antidepressants	Selective serotonin reuptake inhibitors Tricyclic antidepressants Lithium Monoamine oxidase inhibitors
Tranquilizers	Butyrophenones Phenothiazine
H2 antagonists	Ranitidine, Cimetidine
Hormones	Progesterone, Estrogens, Corticosteroids, GnRH agonists 5b-Reductase inhibitors Cyproterone acetate
Cytotoxic agents	Cyclophosphamide Methotrexate, Roferon-A
Anticholinergics	Disopyramide, Anticonvulsants
Recreational	Ethanol, Cocaine, Marijuana

**Treatment:**

1. Treatment of the under lying physical or psychiatric disorder, if present.
2. Behaviour therapy: The methods commonly employed include the following:
  - I. Relaxation training, e.g. Jacobson’s progressive relaxation technique.
  - II. Assertiveness training.
  - III. Systematic desensitisation, aimed at reducing the phobic anxiety related to the sexual act, e.g. in sexual aversion disorder.
  - IV. Biofeedback, using a penile plethysmograph.
3. Masters ‘and Johnson s technique: This is one of the most popular and successful methods of treatment for psychosexual dysfunctions. The patient is not treated alone, but both the partners are treated together. This is called as dual-sex therapy, where both the sexual partners are treated by a team of therapists (one male and one female), although later modifications of this technique use only one therapist. The goal of the treatment is symptom removal, using simple behavioural techniques.

i). Behaviour modification steps, depending on the type of psychosexual dysfunction. Brief examples of the techniques used are:

- a) Sensate focus technique: This is used particularly for treatment of impotence, although it is also useful in management of other dysfunctions as well. The aim is to 'discover' on body (excluding genital area) 'sensate focuses' (body areas where manipulation leads to sexual arousal). This is usually a general exercise before any sex therapy.
- b) Squeeze technique (Seman's technique): This has been used in treatment of premature ejaculation. The female partner is asked to manually stimulate the penis causing erection. When the male partner experiences 'ejaculatory inevitability', the female partner 'squeezes' the penis on the coronal ridge thus delaying ejaculation.

Oral drug therapy: Premature ejaculation may sometimes require treatment with fluoxetine, trazodone, or tricyclic antidepressants such as clomipramine (to retard ejaculation). Several drugs have been used in the treatment of impotence with varying degrees of efficacy, e.g. alpha-blockers (such as yohimbine, idazoxan), opiate antagonists (such as naltrexone), dopamine agonists (such as bromocriptine, apomorphine), Sildenafil citrate has been used for treatment of erectile dysfunction. It is a competitive and selective inhibitor of cGMP (cyclic guanosine monophosphate)-specific PDE-5 (phosphodiesterase type 5). It prevents the rate of breakdown of cGMP causing enhanced relaxation of cavernosal smooth muscle, increase in arterial flow in to corpus cavernosa, compression of subtunical veins, and hence penile erection. The typical dose is 50 mg (25-100 mg), 1 hour before sexual activity. Intracavernosal Injection of Vasoactive Drugs (IIVD): Papaverine, an alkaloid and a vasoactive substance, has been used as an intracavernosal injection in the differential diagnosis of organic and non-organic impotence and also for treatment of impotence

### **SUICIDE**

More than 95% cases: psychiatric disorder, mostly depression (45%)

Causes: Depression : 15%

Alcohol: 15%

Schizophrenia: 10%

Personality disorders: 5%

Risk Factors:

Age > 40 years

Males (males commit more while females attempt more)

Single, unmarried, widowed

Previous attempt

Depression

Suicidal thoughts

Alcohol/drugs

Loss

Attempts: 1% complete suicide in 1 year

Paradoxical suicide: suicide when depression is improving.

### **DIOGENES SYNDROME :**

This is characterized by Gross-self-neglect, especially among elderly reclusive persons, though not always. Some Authorities believe that this is an end-stage personality Disorder, some have Schizophrenia, dementia. As well as neglect the person may live in Squalor, refuse any offers of help and sometimes hoard rubbish (**Sylogomania**) yet be seemingly unconcerned about their situation.

### **Narco Analysis**

- A truth drug or truth serum is a psychoactive medication used to obtain information from subjects who are unable or unwilling to provide it otherwise.
- The unethical use of truth drugs is classified as a form of torture according to international law
- In the latter context, the controlled administration of intravenous hypnotic medications is called "narcosynthesis" or "narcoanalysis."
- It may be used to procure diagnostically- or therapeutically- vital information, and to provide patients with a functional respite from catatonia or mania.

### **Active chemical substances**

- Sedatives or hypnotics that alter higher cognitive function include ethanol, scopolamine, 3quinclidinyl benzilate, temazepam, and various barbiturates including sodium thiopental (commonly known as sodium pentathol) and sodium amytal (amobarbital) Reliability



- According to prevailing medical thought, information obtained under the influence of intravenously administered sodium amytal can be unreliable; subjects may mix fact and fantasy in that context.
- Skeptics imply that much of the claimed effect of the drug relies on the belief of the subject that he or she cannot tell a lie while under its influence.
- Some observers also feel that amobarbital does not increase truth-telling, but merely increases talking; hence, both truth and fabrication are more likely to be revealed in that construct.

### **DISABILITY IN PSYCHIATRY**

Persons with Disability act, 1995 ( PDA 1995) has following list of disability.

1. Blindness
2. Low vision
3. Leprosy - cured
4. Hearing impairment
5. Locomotor disability
6. Mental retardation
7. Mental illness

Indian Psychiatric Society in 2002 developed **IDEAS** (Indian disability Evaluation And Assessment Scale) for quantifying disability in psychiatry .

The following **illnesses** has been given the benefit of disability in psychiatry :

1. Schizophrenia
2. BPAD
3. Obsessive and Compulsive Disorder
4. Dementia

The Parameters used for the assessment of disability are :

1. Self-care
2. Language and Communication
3. Interpersonal Activity
4. Work along with the symptom status in last 2 years.

Altogether the disability should be >40%

National Trust Act (1999) has been formed to give benefit to following illnesses:

1. Cerebral palsy
2. Severe Mental retardation
3. Autism
4. Multiple Disabilities

1. 20 year old girl Nelu enjoys wearing male clothes. Wearing male clothes gives her feelings of more confidence and after these

episodes she is an absolutely normal girl. The likely diagnosis is a.

- a. Trans Transvestism
- b. Fetishism

- c. Dual role Transvestism
- d. Fetishistic Transvestism
2. A homosexual person feels that he is imposed by a female body & persistent discomfort with his sex. Diagnosis is
  - a. Gender identity disorders
  - b. Transvestism
  - c. Voyerism
  - d. Paraphillias
3. Squeeze Technique is used for:
  - a. Impotence
  - b. Premature ejaculation
  - c. Infertility
  - d. Priapism
4. Most accurate treatment for erectile dysfunction:
  - a. Sildenafil
  - b. Master and Johnson technique
  - c. B-blockers
  - d. Papaverin
5. Which of the following is not a common feature of Anorexia Nervosa?
  - a. Binge eating
  - b. Amenorrhoea
  - c. Self perception of being 'fat'
  - d. Under weight
6. A young lady is present with H/O repeated episode of over eating followed by purging using laxatives, she probably suffering from a.
  - a. Bulimia nervosa
  - b. Schizophrenia
  - c. Anorexia nervosa
  - d. Binge eating disorders
7. Not a feature of paradoxical sleep is:
  - a. Decreased muscle tone
  - b. Rapid eye movements
  - c. Brain shows increased metabolism
  - d. EEG shows decreased activity
8. Rhythm is seen in:
  - a. Sleep with eyes closed with mind wandering
  - b. Mental activity
  - c. Awake with eyes open
  - d. REM sleep
9. Which one of the following phenomenon is closely associated with slow wave sleep
  - a. Dreaming
  - b. Sleep walking
  - c. Atonia
  - d. Irregular heart rate
10. Not true about nocturnal penile tumescence is
  - a. Totals about 100 min/night
  - b. Normal phenomenon
  - c. Occurs in NREM sleep
  - d. Can be used to distinguish between psychological or organic impotence.
11. The Non-REM (NREM) Sleep is commonly associated with:
  - a. Frequent dreaming
  - b. Frequent penile erections
  - c. Increased blood pressure
  - d. Night terrors
12. True about treatment of nocturnal enuresis.
  - a. Imipramine
  - b. CPZ
  - c. Alprazolam
  - d. Haloperidol
13. DOC of night terrors:
  - a. Meprobamate
  - b. Tricyclic antidepressant
  - c. Clonazepam
  - d. Diazepam
14. True about narcolepsy:
  - a. Sleep sudden
  - b. Long duration(>3hrs.)of sleep
  - c. Cataplexy
  - d. Presents in IIInd decade
15. Kleptomania means
  - a. Irresistable desire to set fire
  - b. Irresistable desire to steal(pick up) things
  - c. Compulsive hair pulling
  - d. Pathological gambling
16. All of the following are impulse control disorders except:
  - a. Pyromania
  - b. Trichotillomania
  - c. Kleptomania
  - d. Capgras syndrome
17. In which behaviour therapy is helpful:
  - a. Schizophrenia
  - b. Agoraphobia
  - c. Personality Disorder
  - d. Neurotic Depression
18. Behaviour Therapy is not useful in:
  - a. Phobia
  - b. Hysteria
  - b. Stuttering
  - c. OCD
19. Systemic desensitization therapy is used for
  - a. Phobia
  - b. Depression
  - c. Schizophrenia
  - d. Organic Brain syndrome
20. Desensitization Therapy is useful of:
  - a. Phobia
  - b. Anxiety
  - c. Mania
  - d. Depression
21. Behaviour Therapy to change maladaptive behaviours using response as reinforcement uses the principal of:
  - a. Classical conditioning
  - b. Modeling

- c. Social learning  
d. Operant conditioning
22. A 25 year old female presents with 2 year history of repetitive, irresistible thoughts of contamination with dirt associated with repetitive hand washing. She reports these thoughts to be her own and distressing; but is not able to overcome them along with medications. She is most likely to benefit from which of the following therapies:
- Exposure and response prevention
  - Systematic desensitization
  - Assertiveness training
  - Sensate focusing
23. Bright light treatment has been found to be most effective in treatment of:
- Anorexia Nervosa
  - Seasonal Affective Disorder
  - Schizophrenia
  - Obsessive Compulsive Disorder
24. Indications for ECT are:
- Paranoid schizophrenia
  - Depression with suicidal tendency
  - Catatonic Schizophrenia
  - Neurotic depression
25. ECT is indicated in
- Neurotic Depression
  - Auditory hallucination
  - Schizophrenia
  - Delusional Depression
26. ECT is useful in
- Mania (Acute)
  - Chronic Schizophrenia
  - Catatonic Schizophrenia
  - Acute psychosis
27. ECT in depressive phase of MDP is useful because it:
- Produces recurrence
  - Reduces recurrence
  - Shortens duration
  - Increase drug effects
28. ECT causes
- Anterograde amnesia
  - Retrograde amnesia
  - Both Anterograde & Retrograde Amnesia and more of retrograde Amnesia
  - None
29. Memory disturbance of ECT recovers in:
- Few days to few weeks
  - Few weeks to few months
  - Few months to few years
  - Permanent
30. Most common complication of modified ECT
- Intracerebellar bleed
  - Fracture spine
  - Body ache
  - Headache
31. In direct ECT, the intraocular tension is:
- Increased
  - Decreased
  - No change
  - Variable
32. ECT is absolutely contraindicated in:
- Pregnant
  - Very ill patient
  - Raised Intracranial Tension
  - Severe heart disease
33. Stimulation of which of the following leads to elevated mood
- Optic nerve
  - Olfactory nerve
  - Trochlear nerve
  - Trigeminal nerve

**Answer Key**

- C
- A
- B
- A
- A
- A
- D
- A
- B
- C
- D
- A
- C
- C
- B
- D
- A
- B
- A
- D
- C
- C
- B
- D
- C
- B
- D
- B
- C
- B

**Psychoanalysis**

The term psychoanalysis denote a psychological theory of mind and personality development based on the concept of intrapsychic conflict.

**FREUD'S PSYCHOSEXUAL STAGES****FREUD'S PSYCHOSEXUAL STAGES**

1. ORAL (0-1 ½ years)	oral gratification	Schizophrenia, addiction
2. ANAL ( 1 ½ -3 years)	anal gratification( excretion)	OCD
3. PHALLIC (3-5 yrs)	Males: castration anxiety Oedipus complex Females: Penis envy, Electra complex	Sexual dysfunctions
4. LATENCY PHASE (5-12 yrs)	quiescent sexual activity Superego develops	Neurotic disorders
5. GENITAL ( >12 yrs)	adult sexuality	Neurotic disorders

**Defense Mechanism:** These are the unconscious psychological processes defending the **ego**.

**Types of Defense Mechanism:**

Dealins with emotional stressor & internal conflict by

- 1) Projection: Attributing your own wishes, thoughts, or feeling onto someone else. eg "I do not like him because he does not like me"
- 2) Denial: Avoiding the awareness of some painful aspect of reality eg " I know I do not have cancer"
- 3) Splitting: External objects are divided into all good or all bad without considering the whole range of qualities eg "seeing all people without mustache as feminine".
- 4) Regression: Return to an earlier stage of development. eg " dependence on others"
- 5) Somatization: Psychic derivatives are converted into bodily symptoms eg " just thinking of the exam, I get butterflies in my stomach"
- 6) Introjection: Features of the external world are taken and made part of self eg " the resident physician dresses like the attending"
- 7) Displacement: An emotion of drive is shifted to another that resembles the original in some aspect. eg "I had to get rid of the dog since my husband kicked it every time we had an argument".
- 8) Repression: An idea or feeling is withheld from consciousness ; unconscious forgetting. it is mother of all defense mechanism ( most important defence)eg " sexual abuse in childhood ". it is mother of all defences.
- 9) Intellectualization: Excessive use of intellectual processes (ie logic) to avoid affective expression (emotion). eg "It is interesting to note the specific skin lesions which seem to arise as a consequence of my end stage disease"
- 10) Isolation: Separation of an idea from the affect that accompanies it eg "ability to discuss traumatic event without the associated disturbing emotion, with passage of time".
- 11) Rationalization: Rational explanations are used to justify unacceptable attitudes, beliefs or behaviors. eg " I did not pass the test because it was very difficult"
- 12) Reaction formation: Unconscious adaptation of behavior opposite to behavior that would reflect true feelings & intentions. eg " Listen to him tell his family he was not afraid, when I saw him crying"
- 13) Undoing: Acting out the reverse of an unacceptable behavior. eg " I need to wash my hands whenever I have these thoughts"
- 14) Humor : permits the expression of feelings and thoughts without personal discomfort.
- 15) Sublimation: Achieving impulse gratification but altering a socially objectionable aim to a socially acceptable one. eg "channelizing sexual or aggressive impulses into creative activities (painting etc)".
- 16) Suppression: Conscious suppression of pleasure of pleasurable impulses for the benefit of future .it is also called as Psuedo defence or False defense mechanism. eg " I would rather forget that my dog was run over by a car".

**Mature Defense Mechanism**

1. Altruism
2. Anticipation
3. Ascetism

4. Humor
5. Sublimation --It is the most mature defence Mechanism.
6. Suppression--Also called as Pseudo Defence or False Defence As it is a Concious and rest all are Unconciuous

#### **Defense mechanism in OCD**

1. Isolation
2. Undoing
3. Reaction formation.

#### **Defense mechanism in Psychosis**

1. Projection
2. Denial

Von Meduna, in 1934, used 25% camphor in oil intramuscularly to produce convulsions for the first time for therapeutic purposes.

A much safer form of convulsive therapy was used by Cerletti and Bini in 1938 (Table 16.1).

They called it EST or electroshock therapy. Later, this method of treatment came to be known as ECT or electroconvul-sive therapy.

#### **Indications**

The indications for electroconvulsive therapy are:

1. Major severe depression
  - I. With suicidal risk (This is the first and most important indication for ECT)
  - II. With stupor
  - III. With poor intake of food and fluids
2. Severe catatonia (non-organic)
  - I. With stupor
  - II. With poor intake of food and fluids
3. Severe psychoses (schizophrenia or mania)
  - I. With risk of suicide, homicide or danger of physical assault
  - II. With unsatisfactory response to drug therapy

The use of ECT in mania and schizophrenia is not a treatment of first choice and is employed only in the above-mentioned conditions. Contraindications Absolute : none at present.

## **Biological Therapies in Psychiatry**

#### **Relative:**

1. Presence of raised intracranial tension
2. Recent myocardial infarction (MI)

3. Severe hypertension
4. Cerebrovascular accident (CVA)
5. Severe pulmonary disease
6. Retinal detachment, and
7. Pheochromocytoma

### **Technique**

The techniques used for ECT administration are of two types:

- I. Direct ECT is administered in the absence of muscular relaxation and general anaesthesia.
- II. Modified ECT is modified by drug-induced muscular relaxation and general anaesthesia administered by an anaesthetist

### **ECT is of two types:**

- 1) Bilateral ECT: This is the standard form of ECT used most commonly. Each electrode is placed 2.5-4.0 cm (1-1.5") above the midpoint, on a line joining the tragus of the ear and the lateral canthus of the eye.
- 2) Unilateral ECT: In this type, electrodes are placed only on one side of head, usually the non-dominant side. The unilateral ECT is safer, with much fewer side effects, particularly those of memory impairment.

The therapeutic adequacy of the treatment is usually gauged by the occurrence of a generalized tonic-clonic seizure lasting for not less than 25-30 seconds.

### **Duration of Therapy**

The total duration and number of treatments given depends on the diagnosis, presence of side effects, and the response to treatment. Usually 6-10 treatments are sufficient, although up to 15 treatments can be given if needed.

### **Mechanism of Action**

Although the exact mechanism is unclear, one hypothesis states that ECT possibly affects the catecholamine pathways between diencephalon (from where seizure generalisation occurs) and limbic system (which may be responsible for mood disorders), also involving hypothalamus.

### **Side Effects**

1. Side effects associated with general anaesthesia: Deaths during ECT are usually due to the general anaesthesia,
2. Memory disturbances (both anterograde and retro-grade) are very common. These are usually mild and recovery occurs within 1-6 months after treatment.
3. Confusion may occur in the postictal period.
4. Other side effects include headache, prolonged apnoea, prolonged seizure, cardiovascular dysfunction, emergent mania, muscle aches and apprehension.

### **ECT does not cause any brain damage.**

Transcranial magnetic stimulation (TMS) is a noninvasive method to cause depolarization in the neurons of the brain. TMS uses electromagnetic induction to induce weak electric currents using a rapidly changing magnetic field; this can cause activity in specific or general parts of the brain with minimal discomfort, allowing the functioning and interconnections of the brain to be studied. A variant of TMS, repetitive transcranial magnetic stimulation (rTMS), has been tested as a treatment tool for various neurological and psychiatric disorders including migraines, strokes, Parkinson's disease, dystonia, tinnitus, depression and auditory hallucinations.

### **Light Therapy**

The production of the hormone melatonin, a sleep regulator, is inhibited by light and permitted by darkness as registered by photosensitive ganglion cells in the retina. To some degree, the reverse is true for serotonin, which has been linked to mood disorders.

Hence, for the purpose of manipulating melatonin levels or timing, light boxes providing very specific types of artificial illumination to the retina of the eye are effective Light therapy either uses a light box which emits up to 10,000 lux of light, much brighter than a customary incandescent lamp, or a lower intensity of specific wavelengths of light from the blue (470 nm) to the green (525 nm) areas of the visible spectrum.

**Vagal nerve stimulation**

Vagus, the tenth cranial nerve, arises from the medulla and carries both afferent and efferent fibers. The afferent vagal fibers connect to the nucleus of the solitary tract which in turn projects connections to other locations in the central nervous system.

Proposed mechanisms include alteration of norepinephrine release by projections of solitary tract to the locus coeruleus, elevated levels of inhibitory GABA related to vagal stimulation and inhibition of aberrant cortical activity by reticular system activation.

**Biological therapy Used in**

<b>Biological therapy</b>	<b>Used in</b>
Transcranial magnetic stimulation	<ul style="list-style-type: none"> <li>- Resistant major depression (baseline hypofrontality can be reversed)</li> <li>- Obsessive compulsive disorder (OCD)</li> <li>- Post traumatic stress disorder (PTSD)</li> <li>- Map the motor cortex, help determine hemispheric dominance &amp; probe short term memory</li> <li>- To improve some symptoms of Parkinson’s disease like bradykinesia, diminished reaction time.</li> </ul>
Phototherapy	<ul style="list-style-type: none"> <li>- Seasonal depression (seasonal affective disorder)</li> <li>- Sleep disorders</li> <li>- Decreased irritability and diminished functioning associated with shift work</li> <li>- Jet lag</li> </ul>
Vagal stimulation	- Chronic, recurrent major depression
Sleep deprivation	- Depression

**PSCHYOTHERAPY**

Psychotherapy is defined (Wolberg) as, the treatment by psychological means of problems of an emotional nature, in which a trained person (therapist) deliberately establishes professional relationship with the patient to,

1. Remove, modify or retard existing symptoms,
2. Mediate disturbed patterns of behavior, and /or
3. Promote positive personality growth and development

Psychotherapy can be done by verbal or non-verbal means.

**Psychodynamic Approach**

This is one of the most popular approaches to personality. It focuses on change, development and conflicts in people lives, this view owes largely of the contributions of Sigmund Freud. Freud was a physician and he developed the theory in the course of his clinical practice. Freud is famous for his innovative use of free association (a method in which a person is asked to openly share all the thoughts, feeling and ideas that come to his/her mind), dream analysis and analysis or errors to decipher the internal functioning of mind.

The theory visualizes human mind in terms of different levels of consciousness. Thus, we are aware of the current thoughts, which are in the consciousness. Beyond the conscious is the preconscious, which is immediately not accessible but can be accessed. Beyond the preconscious lies the unconscious, of which we are not aware. It contains the repressed desires and impulses.

Freud believed that the unconscious was a reservoir of instinctive drives. Also, it stores all the ideas and wishes that are concealed from conscious awareness, perhaps, because they cause psychological conflict. We are constantly engaged in the struggle to either find some socially acceptable way to express unconscious impulses or in effort keep those impulses from being expressed. The goal of psychoanalytic therapy is to bring repressed unconscious material to consciousness and to thereby aid us in living our lives in a more self aware and integrated manner.

### **Personality Structure:**

The personality consists of three structures i.e. Id, Ego, and superego. They however, should not be treated like three distinct entities. They are used as strong psychological forces and not physical locations in the brain. Freud was able to infer these forces from the way people behave. Let us understand these terms in some detail. Id : Desires : it is that part of personality that deals with immediate gratification of primitive needs, sexual desires, and aggressive impulses. It is totally unconscious. It follows principle.

Thus, the Id seeks one thing only and that is the discharge of tension arising out of biological drives. Need gratification in any manner is its main concern. Reflexes and primary processes are its mechanisms of functioning.

Ego: Reason : It develops out of Id. It works on reality principle. It tries to maximize pleasure and minimize the pain.

It follows the secondary processes.

Super Ego : Conscience: It deals with the ideals. It represents the societal demands and ideas.

It also creates the feelings of guilt and punishes the person if he or she falls short of the societal norms and ideals.

Dream : Dreams are considered as the royal road to unconscious. They have manifest content the dream that we remember - and latent content - the hidden meaning that can be deciphered from the manifest content. Dreams serve three purposes. They work as wish fulfillment device, release of unconscious tension, and work as guardians of sleep. According to Freud symbols in dreams represent different things, wishes, desires, etc. For instance viewing a house has reference to one's body, clothe means nakedness, bath means birth, and beginning a journey means death.

The traditional psychoanalytic approach is criticized on many grounds. It is said that its concepts are vaguely defined; logical distinctions are not made, the case studies are biased, the theory is not testable, the techniques have low reliability and validity, and the efficacy of psychoanalytic therapy is questionable.

Psychoanalysis : emphasizes the "Conflict" between unconscious drives and moral judgments the patients make about their impulses. The conflict accounts for the phenomenon of repression, which is regarded pathological

Conscious - this is conceptualized as awareness

Preconscious - as thought & feeling that are easily available to consciousness

Unconscious - Thoughts & feelings that cannot be made conscious without overcoming strong resistance.

The unconscious contain non verbal forms of thought function and gives rise to dreams, Para praxes (slip of tongue) and psychological symptoms.

Goal - the chief requirement is the gradual integration of the previously repressed maternal into the total structure of personality

Process involves

Free association - in which patients say whatever comes into their minds - allows repressed memories to be recovered and thereby contributes to cure. In the "interpretation of dreams, Sigmund Freud (1856 - 1939) describes the topographical model of the mind as consisting of Transference - it concerns the patient's feelings and behaviors towards the Psychiatrist that are based on infantile wishes the patient has towards parents or parental figures.

Counter transference - the emotion of Psychiatrist for the client.



Arises From Couch wherein patient used to lie on couch while speaking. It is not psychotherapy.

· Unconscious has Primary process thinking : Seen in

- 1) Young children
- 2) Severe psychosis
- 3) Dreams & MR

Behavior Therapy: is a type of psychotherapy (Broadly defined) which is based on theories of learning, and aims at changing maladaptive behavior and substituting it with adaptive behavior.

- a. Systematic Desensitization (SD)
- b. Aversion Therapy
- c. Operant Conditioning Procedures for Increasing a Behavior
  - a. Positive Reinforcement – the desirable behavior is reinforced by a reward.
  - b. Negative Reinforcement – on performance of the desirable behavior, punishment can be avoided.
  - c. Modeling
  - d. Flooding
- e. Operant Conditioning Procedures for Decreasing a Behavior
  - a. Timeout – the reinforcement is withdrawn for sometime, contingent upon the undesired response. This is often used in therapy with children.
  - b. Punishment
  - c. Satiation - the undesired response is positively reinforced, so that tiring occurs.

**Supportive psychotherapy (relationship – oriented psychotherapy)** – offer the patient support by an authority figure during a period of illness, turmoil or temporary decomposition.

It also has the goal of restoring and strengthening the patient defenses and integrating capacities that have been impaired.

### **Brief Psychotherapy**

Short term treatment methods to help people deal with current problems and crises.

### **Group psychotherapy**

Emotionally ill people meet in a group guided by therapist to help one another effect personality change.

**Family therapy** – Focuses altering the interaction among family members and improves functioning

Couple therapy (Marital) – Designed to modify the interaction of two people who are in conflict with each other over one parameter or variety of other parameters, social, emotional, sexual or economic.

**Biofeed back** – it relies on instrumentation to measure moment to moment physiological process.

E.g. Anxiety disorders – Principle – Autonomic Nervous system can be voluntarily controlled.

**Psychosocial treatment and rehabilitation** - Refers to the use of various methods to enable people who are severely mentally ill to develop social and vocational skills for independent living.

E.g. Social Skill training

Interpersonal behaviors required for community survival for independence and for establishing, maintaining and deepening supportive, socially rewarding relationships.

**Contingency Management** – In this the reward is set for the desired behavior – usually done for Drug Dependence Management other Method is Token economy.

**Token economy** – Exchanging tokens as reward for desired behavior usually used for teaching skills to mentally retarded child.

**COGNITIVE BEHAVIOUR THERAPY** : GIVEN BY AARON BECK, (1970), Initially for depression, currently being used for anxiety, schizophrenia, OCD, Mania etc. Cognitive therapy or Cognitive

Behavior Therapy – (CBT) is a kind of psychotherapy which aims at correcting maladaptive methods of thinking, thus providing relief from symptoms. The various cognitive errors and faulty cognitive schemas are described below:-

### **Cognitive errors in Depression Conditions**

Selective abstraction (sometimes termed “mental filter”)	Drawing a conclusion based on only a small portion of the available data
Arbitrary inference	Coming to a conclusion without adequate supporting evidence or despite contradictory evidence
Absolutistic thinking (“all or none” thinking)	Categorizing oneself or personal experiences into rigid dichotomies (e.g. all good or all bad, perfect or completely flawed, success or total failure)
Magnification and minimization	Over- or undervaluing the significance of a personal attribute, a life event, or a future possibility
Personalization	Linking external occurrences to oneself (e.g. taking blame, as summing responsibility, criticizing oneself) when there is little or no basis for making these associations
Catastrophic thinking	Predicting the worst possible outcome while ignoring more likely eventualities.

**Adaptive and maladaptive schemas**

No matter what happens, I can manage somehow.	I must be perfect to be accepted.
If I work at something, I can master it	If I choose to do something, I must succeed.
I m a survivor	I m a fake
Others can trust me	Without a woman [man], I m nothing
I m lovable	I m stupid.
People respect me.	No matter what I do, I won t succeed.
I can figure things out.	Others can t be trusted.
If I prepare in advance, I usually do better.	I can never be comfortable around others.
I like to be cha lledged	If I make one mistake, I ll lose everything.
There s not much that can scare me.	The world is too frightening for me.

**Q. Not a cognitive dysfunction...**

- a. Thought block
- b. Catastrophisation
- c. Selective abstraction
- b. Overgeneralization**

**Ans. a. Thought block**

- Thought block is a disorder of possession of thought found in schizophrenia.
- In this persons thoughts are suddenly blocked and person totally loses what he was thinking.
- Cognitive-behaviour therapy is designed to cognitions and behaviour directly. these are based on correcting the faulty beliefs and ideas.
- Most cognitive therapies focuses on two kinds of disturbed thinking: intrusive thoughts (automatic thoughts) and dysfunctional beliefs and attitudes (dysfunctional assumptions).
- Three factors maintain dysfunctional beliefs and attitudes.
- First, patients attends selectively to evidence that confirms these beliefs and attitudes, and ignore and discounts the evidence which ignore them.
- Second ,people think illogically and have cognitive dysfunctions e.g.
- Over generalization: patients draw general conclusion from single instances.

- Selective abstraction: patients focus on a single unfavorable aspect of situation but ignore favourable aspects.
- Personalization: patients blame themselves for the consequences of the actions of other people.
- Minimization, over generalization & catastrophization. In which the client minimizes his strengths and minimize every achievement of him and would over generalize the failure to various spheres of life.
- And would give the catastrophic meaning to even minor mishappening in life. Eg. Even if he misses a Bus, he would says it is end of the day or god know what else bad is waiting for me today I miss my one bus today, (which ideally is not such a problem if next bus is about to come in next 10 minutes).

### **Psychosurgery**

psychosurgery is a surgical intervention, to sever fibres, with intent of modifying behaviour.

First done by Lima & Moniz

### **Indications**

1. chronic severe, incapacitating obsessive-compulsive disorder.
2. chronic depression not responding to treatment
3. severe, uncontrolled aggressive behaviour.

### **Techniques**

1. Stereotactic Subacute tractotomy: subcaudate lesion is produced. recommended in severe depression, severe ocd.
2. Stereotactic limbic leucotomy: a small caudate lesion and a lesion in cingulate bundle.
3. Amygdalotomy: used for severe, pathological, uncontrolled aggression at present, psychosurgery is an uncommon procedure.

**MULTIPLE CHOICE QUESTIONS**

1. Which of the following is a stage of intuitive thought appearance in Jean Piaget's scheme.
  - a. Sensorimotor
  - b. Concrete
  - c. Preoperational stage
  - d. Formal operation stage
2. Pavlov's experiment is an example of:
  - a. Operant conditioning
  - b. Classical conditioning
  - c. Learned helplessness
  - d. Modeling
3. Many of our bad habits of day to day life can be removed by:
  - a. Positive conditioning
  - b. Time out
  - c. Bio feedback
  - d. Generalization
4. When information memorized afterwards is interfered by the information learnt earlier, it is called:
  - a. Retroactive inhibition
  - b. Proactive inhibition
  - c. Simple inhibition
  - d. Inhibition
5. Operant condition where paradigm pain stimulus are given to a child for decreasing a certain undesired behaviour can be classified as:
  - a. Positive Reinforcement
  - b. Negative reinforcement
  - c. Punishment
  - d. Negotiation
6. Which is not an ego defence mechanism:
  - a. Rationalization
  - b. Repression
  - c. Identification
  - d. Obsession
7. All of the following are defence mechanisms of ego except
  - a. Projection
  - b. Conversion
  - c. Reaction formation
  - d. Transference
8. Not a defence mechanism:
  - a. Derailment
  - b. Repression
  - c. Distortion
  - d. Undoing
9. A chronic alcoholic blames the family environment as a cause of his alcoholism. This is phenomenon of
  - a. Projection
  - b. Denial
  - c. Rationalization
  - d. Sublimation
10. Which of the following excludes painful stimuli from awareness:
  - a. Repression
  - b. Reaction formation
  - c. Projection
  - d. Rationalization
11. Ross classified five stages of:
  - a. Schizophrenia
  - b. Delusion
  - c. Death
  - d. None

**Answer Key**

1. C
2. B
3. B
4. B
5. C
6. D
7. D
8. A
9. C
10. A
11. C

## Child Psychiatry

### Mental Retardation

#### **Introduction (According to ICD - 10 - DCR)**

- IQ - <70 – Mental retardation
- 50 – 70 – Mild MR – Moron-educable up to 6th class
- 35 – 49 – Moderate MR –Imbecile- trainable (study up to 2nd class)
- 20 – 34 - Severe MR –Idiot- specialized care
- < 20 – Profound MR – chronic rehabilitation

Mental retardation is condition of arrested or incomplete development of the mind. Which is especially characterized by impairment of skills, manifested during the development period, which contributes to the overall level of intelligence, i.e. cognitive, language, motor, and social abilities. Retardation can occur with or without any other mental or physical disorder . However , mentally retarded individuals can experience the full range of mental disorder, and the prevalence of other mental disorders is at least there to four times greater in this population than in the general population. In addition, mentally retarded individuals, are at great risk of exploitation and physical/sexual abuse. Adaptive behavior is always impaired, but in protected social environments where support is available this impairment may not be at all fourth character may be used to specific the extent of the behavioral impairment, if this is not due to an associated disorder:

The presence of mental retardation does not rule out additional diagnosis coded elsewhere in this book. However, communication difficulties are likely to make it necessary to rely more than usual for the diagnosis upon objectively observable symptoms such as in the case of a depressive episode. Psychomotor retardation. Loss of appetite and weight and sleep disturbances.

#### **Diagnosis guidelines**

Intelligence is not a unitary characteristic but is assessed on the basis of a large number of different more –or– less level in each individual, there can be impairment in one particular area (e.g. language). Or severe mental retardation.

This presents problems when determining the diagnostic category in which a retarded persons should be classified the assessment of intellectual level should be based on whatever inform on may mental retardation. This presents problems when determining the diagnostic category in which a retarded person should be classified. The assessment of adaptive behavior (judged in relation to the individual's cultural background).

Disorder has a major influence on the clinical and the use made of any skills. The diagnosis category shown should therefore be based on based on global assessment of ability and not on single area of specific impairment or skill. The IQ levels given are provided as a guide and should not be applied rigidly in view of the problems of cross-cultural validity. The categories given below are arbitrary division of complex continuum. And cannot be defined with absolute precision.

The IQ should be determined from standardizes, individually administered intelligence test for which local cultural norms have been determined, and the test selected should be appropriate to the individual's level of functioning and additional specific handicapping conditions. E.g. expressive language problems. Hearing impairment physical involvement. Scale of social maturity and adaptation. Aging locally standardized should be completed if at all possible by interviewing a parent or care- provider that is diagnosis must be regarded as a provisional estimate only. Treatment of MR Child (dividing it in primary, secondary & tertiary prevention will be better)

#### **Key component of treatment include:**

- a. Behavior management
- b. Environmental supervision
- c. Monitoring of the child 's development needs and problems
- d. Programs that maximize speech , language, cognitive , psychomotor , social, self care and occupational

- e. Ongoing evaluation for comorbid psychiatric disorders such as depression, bipolar disorder and ADHD.
- f. Family therapy to help parents develop coping skills deal with guilt or anger.
- Activities of daily living can be taught to MR child by
  - \* Modelling
  - \* Contingency management

### **Disorder of psychological development**

These disorders have the following features in common

- 1) Onset happening usually in infancy or childhood
- 2) Impairment or delay in development of functions are strongly related biological maturation of central nervous system
- 3) A steady course, usually not involvement remissions & relapses most commonly the areas affected are language visuo spatial skills and motor coordination.

Most common the areas affected are language visuo spatial and motor coordination .

The impairment usually lessens as the children grows older.

More common in boys and girls.

A strong family H/o is usually present , hence the presumption of rule of genetic factor. environment factors are not of paramount importance but do influence development functions.

### **(I) Specific Development disorder of speech & language.**

The normal pattern of language acquisition is disturbed. This is not direct It related to neurological or speech mechanism abnormalities , sensory impairment mental retardation or environmental factors Has to be differentiated for normal delay in language development. In this there are multiple associated problems. Often associated with difficulties in reading & spelling in interpersonal relationship & behavior disorders.

- a. Specific speech articulation disorder
- b. Expressive language disorder
- c. Receptive language disorder
- d. Acquired aphasia with epilepsy ( Landau – Kleffner syndrome)

### **(II) Specific Developmental disorder of scholastic skill (SDDSS)**

Normal pattern of skill acquisition is disturbed again from early - stages of development. They are disorders because of abnormalities in cognitive processing that derive from some biological dysfunctions and not due to for e.g. lack of opportunity to learn or brain trauma or disease.

Specific reading disorder

Specific spelling disorder

Specific disorder of arithmetic skills

Mixed disorder of scholastic skills

Reading achievement is substantially below that expected of age. IQ and education, It interferes with academic achievement or activities of daily living that require reading skills.

Usually in excess of sensory-deficits if present starts at 7 years of age.

Treatment includes Re - medial educational approach.

Specific spelling disorder

Writing skills are significantly below that expected (same as in reading disorder)

Specific disorder of arithmetic skills

Mathematical abilities are below that expected of age. IQ and education.

### **(III) Specific Developmental disorder of Motor function**

The main feature is serious impairment in the development of motor coordination not example by mental retardation, congenital or acquired neurological disorder.

### **(IV) Pervasive Development Disorders**

They are group of disorder that classify children presenting with impairments and deviances in Social interaction Language and communications Play.

#### **i) Autism**

Infantile autism - Leo Kanner

Onset – usually before 3 years of age (to be differentiated from childhood schizophrenia which start after 5 yrs of age).

C/F

Impairment in social & interpersonal interaction

Impairment in Language & Non Verbal communication (Eye to Eye contact, facial expression body posture and gestures).

Restricted and stereotype behaviour in patients (Repetitive activity beyond a point of relevance)

Associated features include – Mental retardation, Epilepsy, abnormal response to sensory stimuli e.g. Hyperacusis, self injurious behaviour, (Low dose anti psychotics to control such symptoms.)

### ii) Asperger's syndrome:

Seen in children and adolescents who have a high cognitive ability and apparently normal early language development the main area of deficit is social interaction. Austin in males.

iii) **Rett's syndrome** - It is progressive encephalopathy that develops between 5 and 48 months of age in female children. - Deceleration of head growth between 5-48 months with profound mental retardation other features are abnormalities of gait loss of various function and skills relating to language and social relatedness. Associated features include dysfunctional breathing intermittent hypoventilation breath holding spells.

EEG abnormalities seizures small feet etc.

iv) **Heller's syndrome** (childhood Disintegrative disorder) In This the child is normal till 3-4 years and then Loses his language and socialization.

Previously ,the blame was on the Mother and she was Labelled as “refrigerator Mother ‘ that she is so cold emotionally that she is not able to transfer any emotions to child.

Lesion in autism is in

1. Mismatch in size of corpus callosum

2. Increased size of occipital lobe , parietal lobe and temporal lobe and the frontal lobe is normal

Treatment is one to one interaction. and special school education and social skill treatment.

(C) Behavior & emotional disorder usually occurring in childhood & adolescence

ADHD: Attention-Deficit / Hyperactivity Disorder

A. Either (1)

(1) Six (or more) of the following symptoms of inattention have persisted for at least 6 months to a degree that is maladaptive and inconsistent with development level:

Inattention:

- a. Often fails to give close attention to details or makes careless mistakes in schoolwork work or other activities.
- b. Often has difficulty sustaining attention in tasks or play activities.
- c. Often does not seem to listen when spoken to directly
- b. Often does not follow through on instruction and fails to finish schoolwork chores, or duties in the workplace (not due to oppositional behavior or failure to understand instructions.)
- c. Often has difficulty organizing tasks and activities.
- d. Often avoids dislikes, or is reluctant to engage in tasks that require sustained mental effort (Such as schoolwork or homework).
- e. Often loses things necessary for tasks or activities (e.g. to)'s. school assignments pencils books or toots).
- f. Is often easily distracted by extraneous stimuli
- g. Is often forgetful in daily activities.

(2) Six (or more) of the following symptoms of hyperactivity impulsivity have persisted for at least 6 month to a degree that is maladaptive and inconsistency with developmental level : Hyperactivity

- a. Often fidgets with hands or feet or squirms in seat.
- b. often leaves seat in classroom or in other situation in which remaining seated is expected.
- c. often runs about or climbs' in situations in which it is inappropriate (in adolescents or adults, may be limited to subjective feelings of restlessness).
- d. often has difficulty playing or engaging in leisure activities quietly.
- e. is often “on the go” often acts as if driven by a motor”
- f. Often talks excessively impulsivity
- g. Often blurts out answers before questions have been completed .
- h. often has difficulty awaiting turn.

- i. Often interrupts or intrudes on other (e.g. butts into conversation or games)
  - B. Some hyperactive-impulsive or inattentive symptoms that caused impairment were present before age of 7 years.
  - C. Some impairment from the symptoms is present in two or more settings (e.g at school or work) and at home.
  - D. There must be clear evidence of clinically significant impairment in social academic or occupational functioning.
- Hyperactivity, Attention decreased and impulsivity.

### **Treatment approaches.**

1. Parental counseling
2. Behavior interventions – eg. Positive and negative reinforcement
3. Pharmacology - DOC – Amphetamine- Methylphenidate: the non-st imulant drug is Atomoxetine.

Other drugs being used are dextroamphetamine's, pemoline, imipramine, clonidine and thioridazine.

Contra indicated - Barbiturates – increased hyperactivity / Lithium is of no used in treatment of ADHD.

4. Psychotherapeutic and educational measures- Liaison at School with teachers is very important e.g. telling them that ADHD children do better in one to one setting rather than in a big group, sitting in front row is better and work assignment need to be tailored to improve the attentional deficits.

Tic disorder

Tic are involuntary, sudden, rapid, recurrent, non rhythmic, stereo typed motor movements of vocalizations.

Motor and vocal tic can be simple or complex e.g. of simple motor tics – eye blinking, neck jerking simple vocal tics – coughing, throat cleaning etc.

Complex motor tics – more purposeful and ritualistic e.g. grooming behaviour jumping.

Complex vocal tics – coprolalia – using obscene words etc.

Gilles De la Tourette – Multiple motor & tics

Coprolalia

Duration > 1 years

DOC – Haloperidol and clonidine. now atypical anti psychotics are drug of choice.

Oppositional Defiant Disorder

A pattern of negativistic, hostile, and defiant behavior lasting at least 6 months, during

Which four (or more) of the following are present:

1. Often loses temper
2. Often argues with adults
3. Often actively defies or refuses to comply with adults' requests or rules
4. Often deliberately annoys people
5. Often blames others for his or her mistakes or misbehavior
6. Is often touchy or easily annoyed by others
7. Is often angry and resentful
8. Is often spiteful or vindictive

Note: Consider a criterion met only if the behavior occurs more frequently than is typically observed in individuals of comparable age and developmental level.

### **Conduct Disorder**

A repetitive and persistent pattern of behavior in which the basic rights of others or major age appropriate societal norms or rules are violated. It is the most common childhood psychiatric disorder to develop into antisocial personality disorder.

### **Criteria for Conduct Disorder**

A repetitive and persistent pattern of behavior in which the basic rights of others or major age-appropriate societal norms or rules are violated, as manifested by the presence of three (or more) of the following criteria in the past 12 months, with at least one criterion present in the past 6 months:

AGGRESSION to people and animals

1. Often bullies, threatens, or intimidates others
2. Often initiates physical fights
3. Has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun)
4. Has been physically cruel to people



5. Has been physically cruel to animals
6. Has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)
7. Has forced someone into sexual activity

#### **DESTRUCTION OF PROPERTY**

8. Has deliberately engaged in fire setting with the intention of causing serious damage
9. Has deliberately destroyed others' property (other than by fire setting)

#### **DECEITFULNESS OR THEFT**

10. Has broken into someone else's house, building, or car
11. Often lies to obtain goods or favors or to avoid obligations (i.e., "cons" others)
12. Has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without breaking and entering; forgery)

#### **SERIOUS VIOLATIONS OF RULES**

13. Often stays out at night despite parental prohibitions, beginning before age 13 years
14. Has run away from home overnight at least twice while living in parental or parental surrogate home (or once without returning for a lengthy period)
15. Is often truant from school, beginning before age 13 years The disturbance in behavior causes clinically significant impairment in social, academic, or occupational functioning.

If the individual is age 18 years or older, criteria are not met for antisocial personality disorder.

Typically treatment is of 8 years of age & not later than adolescence. Primary treatment Include individual psychotherapy for the child & counseling & direct training of the patient in child management skills.

#### **Macdonald triad**

The macdonald triad is a set of three behavioral characteristics which are associated with sociopathic behavior. These behavioral characteristics are found in the childhood histories of individuals with sociopathic behavior.

1. Enuresis (bedwetting)
2. Firesetting
3. Torturing small animals

The Macdonald triad is also known as the triad of sociopathy.

#### **Elimination disorder:**

**I) Nocturnal Enuresis** – passing of urine in bed at night twice a week for 3 months or impairment in social, occupational functioning & distress, after 5 years of age. It is of two

##### **Type:**

A. Primary type - Child was never dry

B. Secondary Type – Child was dry for six months and then again passing urine in the bed at night.

Most common type is secondary type and the most common cause for secondary type is stress and/or anxiety.

Treatment of choice is behavior therapy. – Pad and Bell therapy, Alarm therapy.

DOC is intra nasal spray of desmopressin and imipramine is also given.

**II) Encopresis** - Diagnosed after 4 years

Diagnosis: Repeated passage of feces into inappropriate places whether involuntary or intentional.

One event a month for three months.

#### **Childhood Schizophrenia**

After five year of age presence of delusion and hallucination Intelligence quotient is within normal limits.

Childhood depression: It has some unique features in the ways that:

1. There is irritability of the mood, school refusal instead of sad mood.
2. There is a failure to gain weight rather than loss of weight.
3. More of psychotic symptoms.

#### **MULTIPLE CHOICE QUESTIONS**

1. A 9 year old child disturb other people is destructive, interferes when two people are talking does not follow instructions and cannot wait for his turn while playing a game. He is likely to be suffering from:
  - a. Emotional disorders
  - b. Behavioral problems
  - c. No disorder
  - d. Attention deficit hyperactivity disorder
2. Which of the following is not seen in hyperkinetic child
  - a. Aggressive outburst
  - b. Decreased attention span
  - c. Left to right disorientation
  - d. Soft neurological signs
3. An eleven3 month old boy is all the time so restless that the rest of the class is unable to concentrate. He is hardly ever in his seat but roams around the hall. He has difficulty playing quietly. The most likely diagnosis is
  - a. Attention deficit hyperactivity disorder
  - b. Conduct disorder
  - c. Depressive disorder
  - d. Schizophrenia
4. ADHD in childhood can lead to what in future:
  - a. Schizophrenia
  - b. Alcoholism
  - c. Intellectual changes
  - d. Antisocial behaviour
5. Treatment of hyperkinetic syndrome include:
  - a. Haloperidol
  - b. Methyl phenidate
  - c. Alprazolam
  - d. Amphetamines
6. A 3 year old child developmental milestones normal with delayed speech and difficulty in communication, concentration, not making friends
  - a. Autism
  - b. ADHD
  - c. Specific learning disability
  - d. Mental retardation
7. Infantile autism is characterized by\_
  - a. Impaired vision
  - b. Impaired neurobehavioral development
  - c. Impaired folate level
  - d. A socioeconomic hazard
8. Autism is:
  - a. Biological causation
  - b. Pervasive social and language communication problem
  - c. Metabolic disease
  - d. Mainly due to hypothalamus damage
9. A 6 year old child has history of birth asphyxia does not communicate well has slow, mental and physical growth does not mix with people, has limited interest gets widely agitated if disturbed. Diagnosis is:
  - a. Hyperkinetic child
  - b. Autistic Disorder
  - c. Attention deficit Disorder
  - d. Mixed Receptive-Expressive Language Disorder
10. A two years old girl child is brought to the out patient with features of hand wringing stereotype movements, impaired language and communication development, breath holding spells, poor social skills and deceleration of head growth after six months. of age. The most likely diagnosis is:
  - a. Asperger syndrome
  - b. Rett's syndrome
  - c. Fragile X syndrome
  - d. Cotted syndrome
11. A 16 year old male is found to have a mental age of 9 year on I.Q. testing. He has:
  - a. Mild Mental Retardation
  - b. Moderate Mental Retardation
  - c. Severe Mental Retardation
  - d. Profound Mental Retardation
12. X-linked disease leading to mental retardation is:
  - a. Myotonic dystrophy
  - b. Fragile-X syndrome
  - c. Tuberous sclerosis
  - d. Phenylketonuria
13. Patient with IQ of 60 has
  - a. Mild Mental Retardation
  - b. Moderate M.R
  - c. Severe M.R
  - d. Profound M.R
14. In a child of IQ 50 ,which of the following is true except:
  - a. Can look after himself independently
  - b. Can study upto 8th standard
  - c. Can follow simple verbal commands
  - d. Can handle money
  - e. Recognize family members
15. Lack of development of speech in a child can be due to:
  - a. Tongue tie
  - b. Deafness
  - c. Mental subnormality
  - d. Laryngomalacia
  - e. Psychosocial
16. A 14 year old boy has difficulty in expressing himself in writing and makes frequent spelling mistakes. He passes his examination with poor marks. However his mathematical ability & social adjustment are appropriate for his age. Which of the following is the most likely diagnosis?
  - a. Mental Rrtardation

- b. Specific learning disability
  - c. Lack of interest in studies
  - d. Examination anxiety
17. Conduct disorder in a child manifests with all except:
- a. Disregard for right of others
  - b. Does't care for authority
  - c. Decreased head circumference
  - d. Steals things

**Answer Key**

- 1. D
- 2. C
- 3. A
- 4. B,C,D
- 5. D
- 6. A
- 7. B,D
- 8. A,B
- 9. B
- 10. B
- 11. A
- 12. B
- 13. A
- 14. B
- 15. B,C
- 16. B
- 17. C