

# Psychiatry

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# PSYCHOLOGY

**TRANSFERENCE:** Pt → Dr

**COUNTER-TRANSFERENCE:** Dr → Pt

## TRANS-THEORETICAL MODEL OF CHANGE aa

Stage

Substance abuse

1. Precontemplation
2. **Contemplation**
3. Preparation
4. Action
5. Maintenance
6. Relapse / Termination

## Freud's structural theory of mind



Psychoanalysis : Free association



Parapraxis "tongue slip"

## PIAGET'S

Sensorimotor Stage



< 2yrs

object permanence  
~ 9-12 mon

'out of sight - out of mind'

Preoperational Stage



Symbolism

ego-centric

2-7yrs

Concrete Operational Stage



**LOGIC**

7-12yrs

Formal Operational Stage



**Abstract**

> 12yrs

Catharsis: "venting out"

Abreaction: Abnormal reaction

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re-living / re-experienced memory



Personality

Roscharch ink blot TAT Thematic apperceptions  
 ↳ projective / unconscious intentions

**Minnesota Multiphasic Personality Inventory**

↳ objective test

Maslow's Hierarchy of Needs



# DEFENCE MECHANISMS

## MATURE:

'SAASH'

- An athlete focuses on other tasks to prevent worrying about an important upcoming match **Suppression**
- A 40 year old anxious about getting old starts planning details of his retirement **Anticipation** VOLUNTARY
- A mafia boss makes a large donation to charity **Altruism**
- Two nervous medical student jokes about the viva that went horribly **Humor**
- A very short-tempered person takes up kick-boxing as a hobby **Sublimation**

## NARCISSISTIC

D P S

- A mother refuses to admit the death of her child and insists he will be back in the morning. **Denial**
- A man who wants to cheat on his wife accuses his wife of being unfaithful. **PROJECTION**
- A patient says that all the nurses are cold and insensitive, but the doctors are warm and friendly. **Splitting** Borderline PD

## IMMATURE :

- A previously toilet-trained child begins bedwetting again following the birth of a sibling. **Regression**
- A college student continues to suck her thumb when studying for stressful exams. **Fixation**
- Throwing a book or punching on wall after a fight **Acting out**
- A disgruntled employee is repeatedly late to work, but won't admit it is a way to get back at the manager **Passive aggressive**

# NEUROTIC

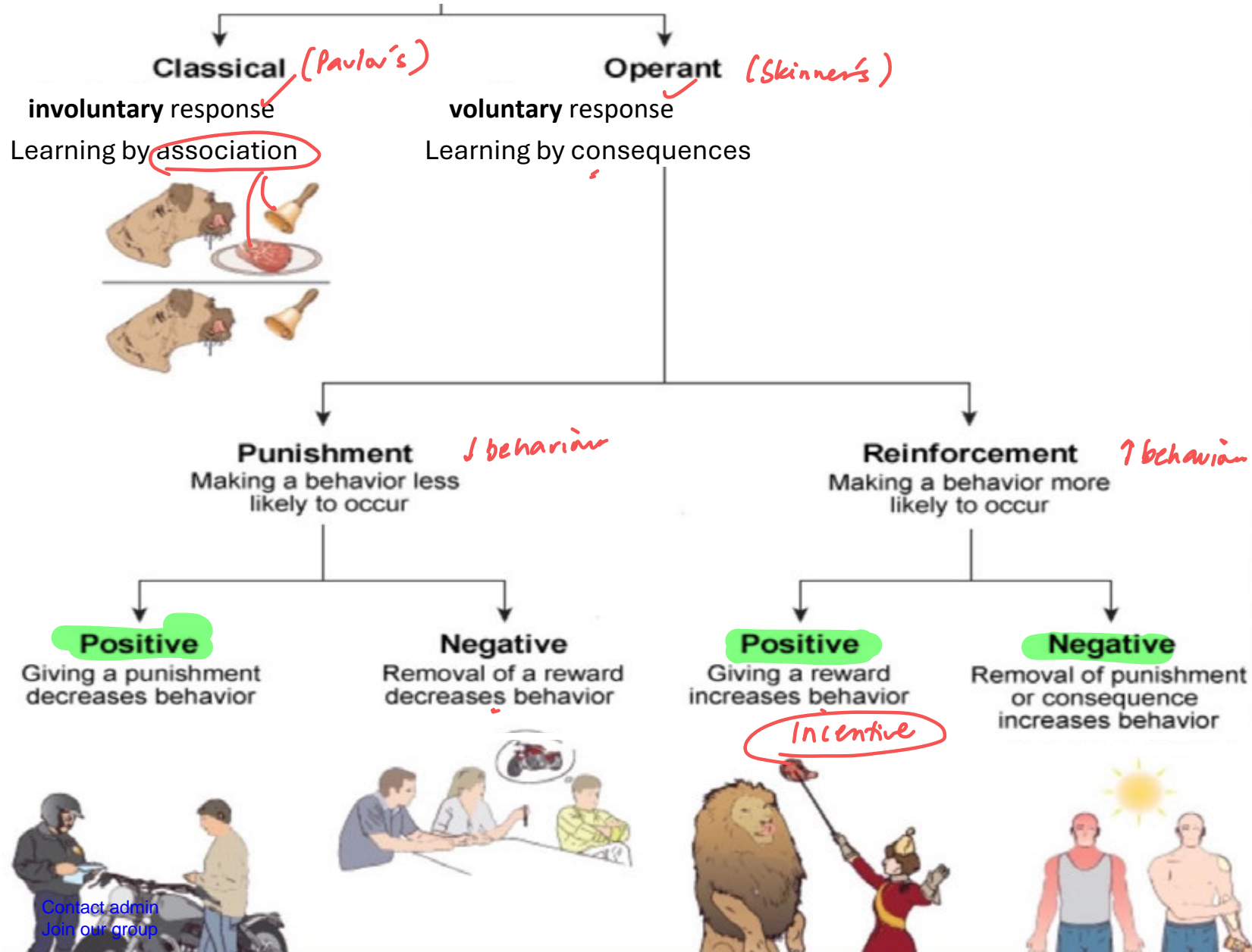
- A 20-year-old does not remember going to counselling during his parents' divorce 10 years earlier **Repression**
- (PRIMARY DEFENCE MECHANISM) — **INVOLUNTARY**
- A patient just diagnosed with cancer discusses the detailed pathophysiology of the disease. **Intellectualisation**
- An employee who was recently fired claims that the job was not important anyway. **Rationalisation**
- After being reprimanded by her principal, a frustrated teacher returns home and criticizes her husband's cooking **Displacement**
- A stepmother treats a child she resents with excessive nurturing and overprotection **Reaction formation**
- Husband bringing gift for ~~his~~ <sup>wife</sup> after fighting previous day **Undoing**
- A child who is a victim of physical abuse discusses the beating without any emotions **Isolation of affect**
- A patient boasts about his physician and his accomplishments while ignoring any flaws. **Idealisation**

OCD:

- D-Displacement**
- U-Undoing**
- R-Reaction formation**
- I-Inhibition**
- I-Isolation of affect**

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# BEHAVIORAL CONDITIONING



Discontinuation of reinforcement eventually eliminates behaviour

*Extinction*

# General Psychiatry- MENTAL STATE EXAMINATION

## PERCEPTION

Hallucination: VS Illusion:  
*x stimulus*                      *stimulus ✓*

True Hallucinations	Pseudo- Hallucinations
outer objective	inner subjective
<i>controlled will</i>	

- Auditory** → Psychosis: schizophrenia
- Visual** → Medical illness (delirium, drugs)
- Tactile** → Cocaine abuse
- Olfactory / gustatory** → Temporal lobe epilepsy

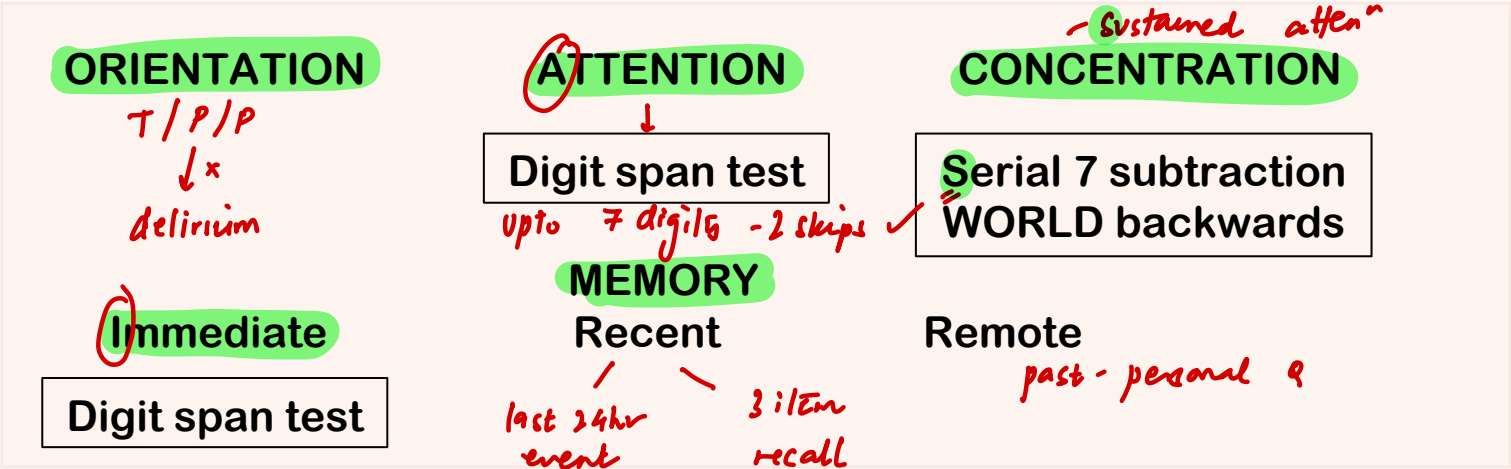
**-Reflex hallucination/ Synesthesia:**  
*stimulus one sense → percep<sup>n</sup> diff sense*  
*- LSD*

**-Functional hallucination:**  
*same sense*  
*stimulus → perception*

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**Mood** - Over a period of time  
**Affect** - Cross-sectional / examiner

*"labile"*  
*"flat"*

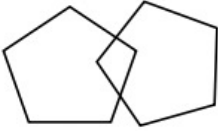


- GRADES OF INSIGHT**
- 1-Complete denial
  - 2-Slight awareness
  - 3-Awareness + Blame on others
  - 4-Intellectual insight
  - 5-True emotional insight - Future behaviour

Proverb testing  
 Similarity assessment } *Abstract*

What to do in a fire? Test  
 Future planning } *Personal*  
 Behavior in meeting } *Social* } *Judgement*

# Mini-Mental State Examination (MMSE)

Name John Williams	Date Feb 21, 2023	
<b>Instructions:</b> Ask the questions in specified sequence and give one point for each correct response for each question or task.		
Questions	Maximum Score	Patient's Score
1. "What year is this?" "What is the current season?" "What month is this" "What's the date today?" "What day of the week it is?" (Score 1 point for each correct answer.) <span style="color:red">①</span>	5	3
2. "Which country are we in right now?" "What state/province are we in?" "What city or town are we in?" "What city or town are we in?" "What's the street address of your home / What's the name of this building?" "On which floor are we located / In which room are currently located?" (Score 1 point for each correct answer.) <span style="color:red">②</span>	5	4
3. "I'm going to name three words/objects and you need to repeat them. Then remember them because I'm going to ask you to name them again later." (EX: BALL - CAR - MAN / APPLE - PENNY - TABLE) <span style="color:red">- naming</span> <span style="color:red">- recent memory</span>	3	2
4. "Spell WORLD backwards" Answer: <b>D-L-R-O-W</b> <span style="color:red">concentr</span>	5	4
5. "Now, name the three objects/words I asked you to remember." (Give one point for each.) <span style="color:red">←</span>	3	3
6. "What object is this?" Show a wrist watch. <span style="color:red">naming</span>	1	1
7. "What object is this?" Show a pencil. <span style="color:red">naming</span>	1	0
8. "Repeat this phrase: <b>No ifs, ands, or buts.</b> " <span style="color:red">Com</span>	1	1
9. "Read the words and then do what it says." (Give the patient/client a sheet of paper with <b>CLOSE YOUR EYES</b> written on it.) <span style="color:red">comprehension</span>	1	1
10. "Take the paper in your right/left hand, fold it in half, and put it on the floor." (Give the patient/client a piece of paper and score 1 for each action taken.) <span style="color:red">Command</span>	3	3
11. "Make up and write a complete sentence on a piece paper." (Sentence must contain a verb and noun.) <span style="color:red">Language</span>	1	1
12. "Copy this design, please."  <span style="color:red">visuospatial</span>	1	1
Contact admin Jr group <b>TOTAL</b>	<span style="color:red">③</span> 30	24

## Levels of consciousness:

- Alert
- Lethargy = Somnolence
- **Oneroid:- dream-like/ hallucinations**
- Obtundation
- Stupor = Akinetic mutism
- Coma



Cognitive decline  
 $\leq 23$  abN

# Delirium VS Dementia

Delirium	Dementia
Hallmark is <i>impaired consciousness</i>	<b>AMNESIA</b> - memory <b>APHASIA</b> - speech <b>APRAXIA</b> - learned mot <b>AGNOSIA</b> - objects
<ul style="list-style-type: none"> <li>• Acute medical illness</li> <li>• Autonomic dysfunction</li> <li>• Abnormal EEG (<i>δ waves</i>)</li> <li>• Carphologia/floccillation (picking at covers/clothes)</li> <li>• Illusion, delusion</li> <li>• Sundowning (worse at night)</li> <li>• Develops quickly</li> <li>• Fluctuating course with lucid intervals</li> </ul>	

↓

As - treat underlying cause

- └ avoid restraints
- └ Antipsychotics if needed — DT/AM
- └ BZD xx (except alcohol withdrawal)

# Thought Disorders QQ

## Stream

- Flight of ideas *speed ↑ (mania)*
  - Pressure of speech *"*
  - Thought retardation/block *depression*
  - **Circumstantiality** *'beat and bush'*
  - Prolivity *?*
  - Clang *?*
- "I'm fine, dine, shine, all the time."
- **Perseveration** *beyond relevance*
- Whats your name? What do you do? What is your birthdate?
- Palilalia** - word
- Logoclonia - Last syllable *Banana-na-na*

## Content

- Delusion
- firm false
  - unshakeable
  - ≥ Imov

## Possession

- 'Someone is putting thoughts in my mind' *Insertion*
- 'Someone is taking away my thoughts' *withdrawal*
- 'Thoughts escape my mind, & others can access them' *broadcast*
- Obsessions *ego-dystonic*

## ~~Schizophrenia~~ Form

- Derailment *↗ ↘*
- Loosening of association
- Tangentiality *↗ ↘*
- Neologism
- Incoherence = word salad

## Delusional disorder

- MC delusion: *persecution*
- Folie a deux: *shared* *1 - (1)*
- Misidentification
- Capgras- *oh crap! family → stranger*
- **Fregoli**- *family → stranger*  
*family giving foli "mask"*



- DeClerembaut syndrome- *Erotomania*
- Othello syndrome- *morbid jealousy - alcohol*
- Cotard syndrome- *Nihilistic delusion*
- Ekblom syndrome- *delusional parasitosis*

A doctor asks a patient, “How old are you?” The patient replies: “You know, doctor, I grew up in a small village. Married early at 12. My husband is 5 years older. Had two children by 18. Now I take care of my grandchildren also... anyway, I am 38 years old.”

Which thought disorder is this?

A) Tangentiality ✕✕

B) Derailment ✕✕

C) Circumstantiality

D) Flight of ideas ✕✕

# Personality disorders

- Inflexible, maladaptive patterns of behaviour- Ego-syntonic
- Usually present by early adulthood

## Cluster A personality disorders

↑ psychotic

Pervasive distrust, Suspiciousness

Voluntary social withdrawal, Content with social isolation (vs avoidant)

Odd beliefs or Magical thinking

Paranoid

Schizoid

Schizotypal

## Personality traits:

- Openness
- Conscientiousness
- Extroversion
- Agreeableness
- Neuroticism

## Cluster B personality disorders

↑ substance abuse

Criminality, Impulsivity, Hostility (18 years old)

Unstable interpersonal relationships, Impulsivity, Suicidality

Females > Males

Splitting, Dialectical BT

Attention-seeking, Dramatic speech & emotions

Grandiosity, Sense of entitlement, Require excessive admiration

Antisocial PD

Borderline PD

Histrionic PD

Narcissistic PD

Conduct D (child)

Animal cruelty

Fire setting

Bed wetting

MacDonald

## Cluster C personality disorders

↑ anxiety

Hypersensitive to rejection & criticism, Socially inhibited

Preoccupation with order, perfectionism, & control; Ego-syntonic

Excessive need for support, Low self-confidence

Avoidant PD

OCPD / Anankastic

Dependent PD

# Psychotic disorders



J R I P  
 Judgement  
 Reality  
 Insight  
 Personality

} x - psychoses

# Schizophrenia

## DSM-5 Criteria for Schizophrenia

$\geq 6$  months

•  $\geq 2$  symptoms must be present for  $\geq 1$  month & at least one symptom must be either (1), (2), or (3):

1. **Hallucinations**
2. **Delusions** (Can be either bizarre or non-bizarre)
3. **Disorganised speech** (e.g., frequent derailment or incoherence)
4. Grossly disorganised or catatonic behaviour verbal motivation
5. Negative symptoms (e.g., affective flattening, alogia or avolition)

• Continuous disturbance for **6 months**

• **Social or occupational dysfunction** for significant portion of the time

## Neuroimaging:

loss of cortical tissue volume with ventricular enlargement

## Eugene Bleuler: 'Schizophrenia'

- A**utism "autistic thinking"  $A=B$   $B=C$   
( $A=C$ )
- A**mbivalence
- A**ffective flattening Auditory hallucinations?
- A**ssociation lost

## Schneider's FRS:

- 3 auditory hallucinations 1st / 2nd / 3rd
- 3 made phenomenon-Impulse, volition, affect
- 3 thought process insert / with / broadcast
- Somatic passivity
- Delusional perception

<b>GOOD PROGNOSTIC FACTORS</b>	<b>BAD PROGNOSTIC FACTORS</b>
Acute onset or abrupt onset	Insidious onset
Advanced age at onset (>35 yrs) Except: <i>delusional</i>	Early onset (<20 yrs)
Catatonic, paranoid subtype	Simple, disorganised, hebephrenic
Female sex	Male sex
Prominent positive symptoms	Prominent negative symptoms
Presence of affective symptoms	Absence of affective symptoms
Family history of mood disorders	Family history of schizophrenia
-	Premorbid PD/ <u>stressor</u> / neurodev delay

General Prevalence: *1%*

One parent, Dizygotic twin: *12%*

Both parents: *40%*

Monozygotic twin: *47%*

DiGeorge syndrome

Heavy cannabis use

Downward drift hypothesis: *↓SES*

Advanced paternal age (*Klinefelter*)

# Antipsychotics

**Typical (1<sup>st</sup> gen)** → D2 ⊖ <sup>max</sup> (↑ potency)   
 Haloperidol, Fluphenazine   
 mesolimbic - +ve symptoms   
 nigrostriatal - EPS   
 tuberoinfund - ↑ PRL   
**Thioridazine, Chlorpromazine** (↓ potency) - H<sub>1</sub> ⊖, M ⊖   
 (hypotension)   
**Atypical (2<sup>nd</sup> gen)** → 5HT<sub>2A</sub> ⊖ / 5HT<sub>2C</sub> ⊖ : wt gain   
 Clozapine, Olanzapine, Quetiapine, Risperidone, Ziprasidone   
**3<sup>rd</sup> gen.** (Aripiprazole/ Cariprazine) <sup>partial</sup> D2 agonist   
 (max D2 ⊖ out of atypical)

Extra-Pyramidal Symptoms (ADAPT)		Treatment
Acute dystonia ~ hrs	Sudden, sustained contraction Torticollis, Trismus, Oculogyric crisis	Anticholinergics Benztropine/ Promethazine/ diphenhydramine/ Trihexyphenidyl
Akathisia - days-wks	Subjective restlessness, Inability to sit still Most common	B blockers → BZD
PD ~ wks - months	Gradual-onset tremor, rigidity, bradykinesia	Anticholinergics
Tardive dyskinesia ~ months - yrs D2 hyper	Dyskinesia of mouth, face, trunk, extremities Rabbit syndrome	• STOP ANTI PSYCHOTIC • Anticholin CI • VMAT ⊖ : Valbenazine
Neuroleptic malignant Sx	Fever, muscle rigidity, CPK high	• STOP ANTI PSYCHOTIC • Dantrolene

# Antipsychotics

- Max EPS: Haloperidol (atypical: Risperidone)
  - Min EPS, DOC for refractory psychoses:  $\geq 2$  AP (1-atyp) CLOZAPINE
  - Max metabolic S/E, Sialorrhea, Seizure, Myocarditis, Agranulocytosis: Clozapine  
 ↳ idiosyncratic
  - QT prolongation: Halop / Ziprasid / Queti / Thioridazine  
 ↳ wet pillow
  - Min weight gain: Ziprasidone
  - Retinal pigmentation: Thioridazine
  - Vortex keratopathy, Cholestatic jaundice: Chlorpromazine
  - Cataract: Quetiapine
  - PD induced psychosis DOC: Pimvasein
  - Technique for depot injections: Z-tracking
  - Longest acting: Penfluridol
  - TOC/ Depression + suicide / stupor: ECT (Indirect)
- [Anaesthetic agent of choice: Methohexital]

## Duration of treatment:

- 1 episode: 2 years.
- 2 episodes: 5 years.
- 3 episodes: life-long.

## Monitoring of clozapine:

WBC <3000, ANC <1500

Once / week: 6mon

Once/2 weeks: 6mon

Once/ month: >1yr

\* Carbamazepine  
 ↳ (x) risk

# CATATONIA

Stupor *akinetic mutism*

Waxy flexibility *initial R*

Negativism (*opposite*)

Automatic obedience *do whatever*

**Catalepsy** - *passive*

**Posturing** - *active*

**Mannerism** - *purposeful*

**Stereotypy** - *nonpurposeful*

**Echolalia** *repeat words*

**Exchopraxia** " *actions*

Grimacing

Ambitendency *back & forth*



-DOC: BZD (*Lorazepam*)

-TOC: ECT (*Indirect*)



# Mood disorders

DEPRESSION (MDD)

x 14d

- Depressed mood, +
  - Sleep
  - Interest deficit
  - Guilt
  - Energy deficit
  - Concentration deficit
  - Appetite
  - Psychomotor retardation
  - Suicidality
- } ≥ 4/8



OMEGA SIGN

Veraguth fold

Atypical D

Mood reactivity, Hypersomnia, Hyperphagia  
 Leaden paralysis  
 Avoid TCA  
 MAO ⊖ / SSRI ≡

## Schizoaffective disorder

Concurrent mood episode, active-phase symptoms of schizophr. + at least 2-week lifetime h/o delusions or hallucinations in the absence of prominent mood symptoms

MDD with Psychotic Features → mood congruent

Dysthymia/ chronic depression: ≥ 2yrs

Double depression: dysthymia + MDD

Acute mania

Hypomania

(x) require admission  
 ≥ 4d

- Distractibility
  - Irresponsibility
  - Grandiosity
  - Flight of ideas
  - Activity increased
  - Sleep decreased
  - Talkativeness
- } ≥ 7d

BPD - I

Mania + /- Depression

BPD - II

Depression + Hypomania



Rapid cycling disorder ≥ 4 cycles / yr

R/F: Female, Hypothyroid, Substance abuse, BPD 2

# Postpartum disorders

	PP BLUES	PP Depression / MDD $\in$ peripartum onset	PP Psychoses
<u>Onset</u>	2-3 days (resolves within 10 days)	Within 4 weeks	Variable
<u>Symptoms</u>	Mild depression, tearfulness, irritability	✓ SIGE CAPS $\geq 14d$	Delusions, hallucinations, thought disorganization
<u>Treatment</u>	Reassurance & monitoring	Antidepressants, psychotherapy $\neq$ CBT	- Antipsychotics, Antidepressants - Do not leave mother alone with infant

FDA approved: Brexanolone (iv) / Zuranolone (oral)

**Grief:** Sadness, Guilt, Visual & auditory hallucinations, Suicidal ideation absent

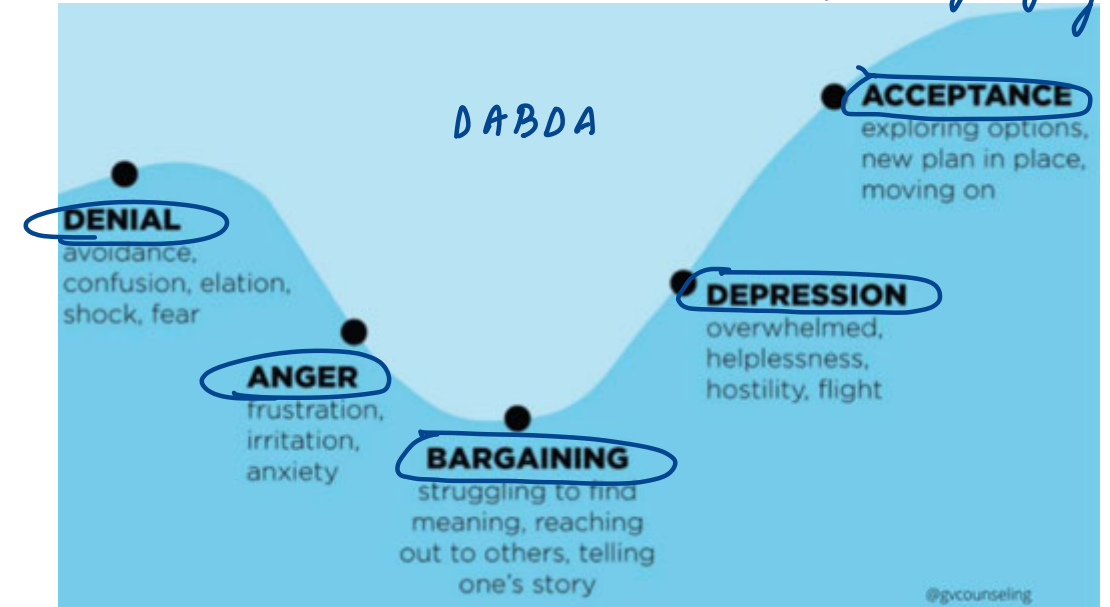
**Delayed grief:** >2 weeks after triggering event

**Grief > 12 months:** Chronic grief/ Persistent complex bereavement disorder

**Stress:** Test of resource → forces a reaction/response

**Burnout:** Detachment / Ineffectiveness/ Exhaustion

Ross - Kubler stages of grief



# Suicide

- Sex (male, LGBTQ) R/F
- Age
- Depression
- **Previous attempt (highest risk factor)**
- Ethanol or drug use
- Rational thinking loss (psychosis)
- Sickness (medical illness)
- Organised plan
- Stated future intent
- No spouse or other social support

- MCC of suicide overall: Mood D = (15%) > Schizophrenia (10-12%)
  - MC mode: Hanging
  - 5-HIAA CSF: ↓
  - PARASUICIDE (NSSI): Non-suicidal self-injury behaviour - Borderline PD
  - COPYCAT SUICIDE: Trigger warning
  - Paradoxical suicide/ antidepressants → ↑↑ r/o suicide
- Black box warning for anti-depressants: 'monitor young adults closely'

# Antidepressants - ↓ 5HT ↓ NE ↓ Dopa

- Takes 4–8 weeks for antidepressants to show effect
- **Continuation-phase treatment: 6 months**
- **Maintenance for 1-3 years:** high risk of recurrence or persistent residual depressive symptoms
- **Maintenance treatment indefinitely:** 3 or more lifetime episodes, chronic episodes for 2 or more years, strong family history, or severe episodes (suicidal attempts)

*↑ safety profile*

*SSRI (1st line)*

Fluoxetine, Fluvoxamine, Paroxetine, Sertraline, Escitalopram, Citalopram.

*SNRI (severe D)*

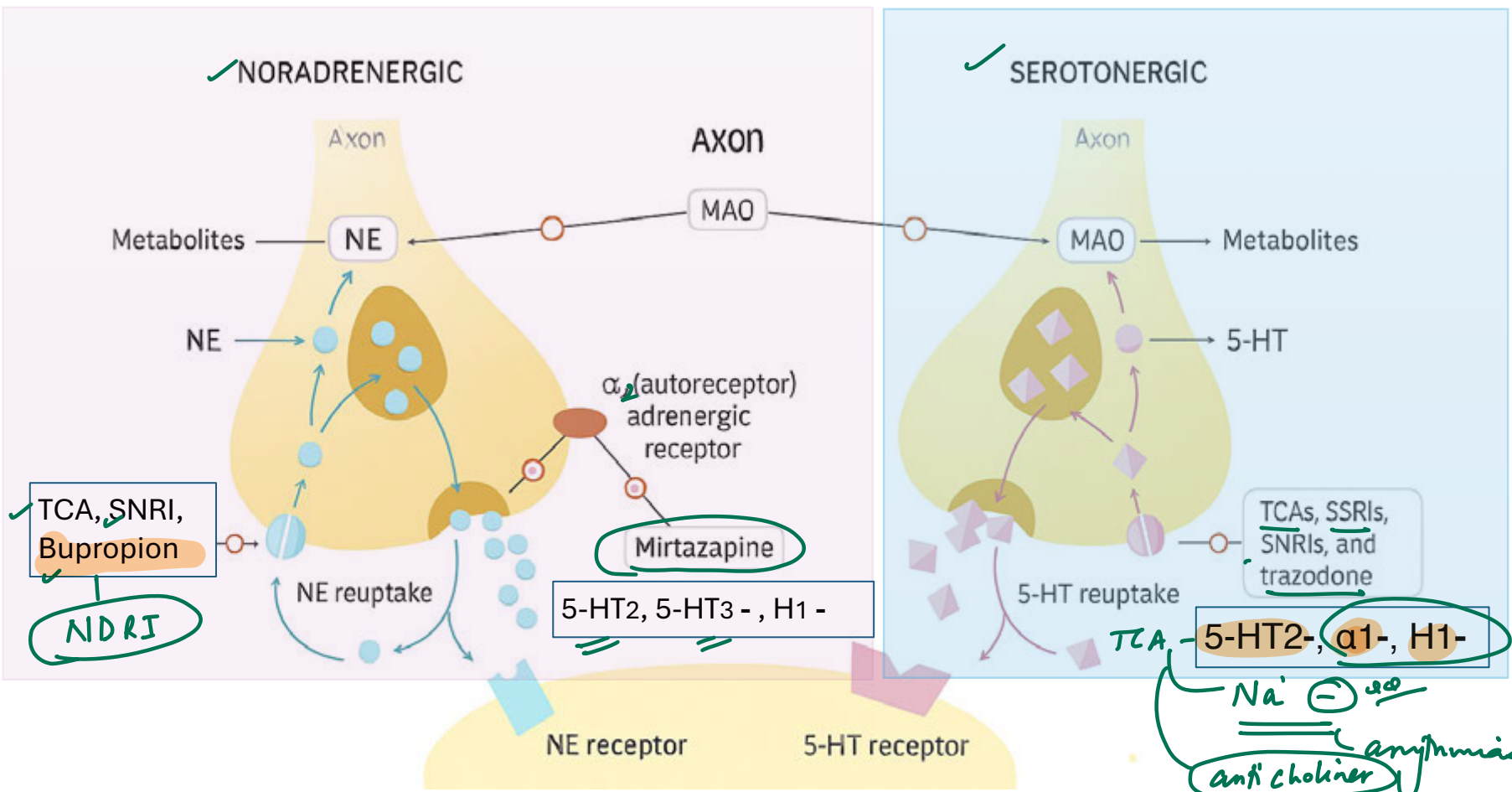
Venlafaxine, Duloxetine, Milnacipran

*TCA*

Amitriptyline (3), Nortriptyline (2), Imipramine, Desipramine, Clomipramine, Doxepin, Amoxapine.

*MAO ⊖*

Tranylcypromine, Phenzelzine, Selegiline (selective MAO-B inhibitor) → PD



*'SPARI'*

Inhibit serotonin reuptake, Partial agonist at 5HT<sub>1α</sub>: Vilazodone  
+ antagonist at 5HT<sub>3</sub>: Vortioxetine

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# Antidepressants

-MC S/E of SSRI: *acute: GI s/e*  
*chronic: sexual s/e: ↓ libido/delay ejac*

-SIADH, Vivid dreams, Dry mouth, Sweating: *SSRI*

-S/E: Hypertension, Discontinuation syndrome, Use in fibromyalgia/neuropathy *SNRI*

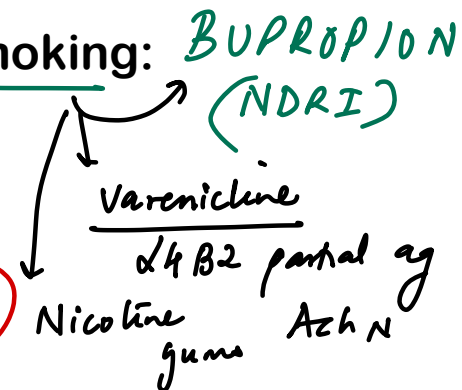
-Min sexual S/E: *Mirtazapine (sed<sup>n</sup> ✓)*

-Min weight gain, sedation, sexual s/e, can cause seizures in Bulimia/Alcoholics, Anti-smoking: *BUPROPION (NDRI)*

vs Bupirone: *Anti-anxiety 5HT<sub>1A</sub> ⊕*

-Priapism, Sedation: *trazodone*

-Respiratory depression, hyperpyrexia, prolonged QT, convulsions, cardiotoxicity *TCA*



*Na H<sub>2</sub>O<sub>3</sub>* Hemodialysis: *No role*

-Antidepressant of choice in pregnancy: *Sertraline* Most teratogenic: *Paroxetine*

-Drugs with anti-suicide ability: *Li / Clozapine / Esketamine (Resistant)*

-Clonus, Diarrhea, Altered Mental Status on antidepressants St. John's wort, Opioids, Linezolid *Serotonin S<sub>x</sub>*

DOC: *Cyproheptadine*

-MAO - + tyramine *(wine/cheese) hypertensive crises*

DOC: *Phenelzamine (Reversible α ⊖)*

# Mood stabilisers

DOC in bipolar disorders:

LITHIUM

Affects neurotransmission & second messenger systems, neuroprotection

Acute: Li + Atypical AP

DOC in rapid cyclers- Valproate

mania

DOC in pregnancy- Atypical AP

## Levels:

Prophylaxis- 0.5-0.8 mg/L

Acute Mania- 0.8-1.2

Toxicity- >1.5

Dialysis- >4 / symptomatic

T<sub>1/2</sub>: 24hrs

Measurement: 5d after initiation / 12hr after last dose

## Adverse Effects of Lithium

- Tremors (mc)
- Nephrogenic diabetes insipidus

DOC: ENaC ⊖

- Thyroid dysfunction ↓/↑
- Hyperparathyroidism<sup>a</sup>/
- Acne, Psoriasis
- Weight gain
- Leukocytosis
- Teratogenic: Ebstein anomaly - atrial<sup>a</sup> of RV

(bx) / p-wave ↑↑

## Li TOXICITY

R/F:

- ✓ Volume loss/ AKI
- ✓ Nausea, vomiting
- ACE inhibitors
- Thiazides
- NSAIDs

Li - Na ↑

↓ GFR → RAAS

CF:

- Slurred speech
- Hyperreflexia
- Seizures, Ataxia

CNS

A 28-year-old female patient diagnosed with depression was started on Imipramine.

After 2 weeks, the relatives notice new symptoms: the patient has become excessively cheerful, overly excited, wearing colourful clothes, and talking excessively.

What is the most appropriate next step in management?

A. Continue imipramine and add benzodiazepines

B. Stop imipramine and start an antipsychotic *(atypical)*

C. Continue imipramine and add an antipsychotic

D. Stop imipramine and add sodium valproate

# Anxiety-related disorder

## DSM-5 Criteria for Generalized Anxiety Disorder

Excessive anxiety & worry, occurring more days than not for  $\geq 6$  months, about a number of events or activities

↳ "free floating"

Anxiety & Worry are associated with  $\geq 3$  of the following symptoms:

- Restlessness or feeling keyed up or on edge
- Being easily fatigued
- Difficulty concentrating or mind going blank
- Irritability
- Muscle tension
- Sleep disturbance

Rp → SSRI / SHT<sub>1A</sub> (+)  
↳ CBT

## Social Anxiety Disorder:

- Fear of embarrassment or poor performance in social or work settings for  $\geq 6$  months
- Social setting type:- Parties, dating, public restrooms
- Performance type:- Work meetings, presentations, speeches

# Panic disorder and Phobia

## DSM-5 Criteria for Panic Disorder

- Recurrent unexpected panic attacks
- At least one of the attacks has been followed by at least **1 month** of one or more of the following:

### 1. Persistent concern about having additional panic attacks

2. Worry about the implications of the attack or its consequences
3. A significant change in behaviour related to the attacks

4. Presence or absence of **agoraphobia** - fear space escape may be difficult

The panic attacks are **not** due to the direct physiologic effects of a substance (e.g., medication or drug of abuse) or a general medical condition (e.g., hyperthyroidism).

1 mon

"impending doom"  
panic attack

## DSM-5 Criteria for Phobia

- Marked and **out of proportion** fear within an environmental or situational context to the presence or anticipation of a specific object or situation.
- The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the child's normal routine, academic functioning, or social relationships.
- The symptoms must have a duration of at least **6 months**.

• Acrophobia: h<sub>t</sub>

• Ailurophobia: cats

• Cynophobia: dogs

• Trypanophobia: needles

• Mysophobia: germs

> 6 mon

R<sub>p</sub> → systematic desensitization

# OCD related disorders

## DSM-5 Criteria for **OCD**

≥ 2 wks

mc: Contamination

### Obsessions are:

Recurrent & persistent thoughts, urges, images that are experienced as **intrusive & unwanted**, & that in most individuals cause marked anxiety or distress

Ego-dystonic

### Compulsions are:

**Repetitive behaviours** or mental acts that the individual feels driven to perform in response to an obsession

mc: checking

• The obsessions & compulsions are time-consuming or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Rp → CBT (Exposure → Resp prev<sup>n</sup>)

## OCD-Related Disorders

- **Hoarding disorder** → (x) response
- **Body dysmorphic d/o**
- **Olfactory reference d/o**
- **Body focused repetitive behavior d/o:**

### **Trichotillomania**

### **Excoriation d/o**

Join our group

## Impulse-control disorders:

- **Pyromania** - setting fire
- **Kleptomania** - theft
- **Satiriasis/nymphomania** - sexual
- **Intermittent explosive disorders**

nn

# Stressor-related disorders

## Adjustment Disorder:

- Distress, sadness, outbursts
- Symptoms begin within 3 months of stressor but subside before 6 months

## Acute Stress Disorder:

Symptoms lasting <1 month after event

## Post Traumatic Stress Disorder (PTSD):

- Life threatening or intense trauma
- Sense of threat – Persistent feelings of danger, hypervigilance, exaggerated startle response
- Avoidance – Efforts to avoid distressing memories, thoughts, or external reminders
- Re-experiencing – Intrusive memories, flashbacks, nightmares

Symptoms lasting >1 month after event

} emotional

} life-death

# Eating disorders

MC eating disorder: *Binge-eating*

<u>3 or more months</u>	<u>Anorexia</u> (Purging/Restrictive)	<u>Bulimia</u> Recurrent bingeing - purging <i>lax/exc</i>
BMI <i>aa</i>	< 18.5	(N) - ↑
Distorted body image <i>aa</i>	(+) (+)	(-)
Amenorrhea Osteoporosis Suicide	(+) (+)	(-)
<u>Parotitis</u> , <u>Tooth decay</u> <u>Hypo Cl<sup>-</sup></u> , <u>K<sup>+</sup> Metabolic alkalosis</u> <u>Mallory Weiss syndrome</u>	(-)	(+) (+)



Russel sign

*R<sub>1</sub> → Nutritional + Atypical AP ↓ SSRI*  
*rehab -*

Refeeding syndrome: ↓ K ↓ Mg ↓ PO<sub>4</sub>

# Dissociative disorders

Stressor +

## Dissociative Amnesia

Reversible, patient aware and distressed by memory loss

## Dissociative fugue

Amnesia for personal identity, not confused

Depersonalisation: Feeling detached from oneself

Derealisation: Feeling detached from the surroundings

} "as if"

Reality testing intact

## Dissociative Identity Disorder:

Having two or more distinct personalities each with distinct Personality traits, Memories, Behaviour

## Ganser syndrome- Prisoners

Var bereiden - pseudo-stupidity / approx answers

## AUTISM SPECTRUM DISORDER

- Onset < 3yrs
- Social interaction impaired
- Repetitive behaviours, Narrow interests
- +/- Language delay
- Speech preserved: *Asperger's*

*Cognitive decline 'Savants'*

- Regression in girl > 6 mon-3yrs:

*microphaly / stereotypy*

RETT Sx

*XLD*

Gene: *MECP2*

Rx: *Trofenitide (G-P-E) IGF-1*

*(X) note of Cannabin 4ly Rn Gln (+)*

- Regression in any gender > 2yrs:

Heller Sx = Childhood

*disintegrating*

## ADHD (Previous: Minimal brain dysfunction)

More in boys; R/o conduct disorder / substance abuse

*6 X 2 = 12* — onset < 12yrs  
*> 6mon 2 settings*

- < 6yrs: Behavioural therapy
- > 6yrs: Stimulants : methylphenidate, amphetamines, modafinil
- Non-stimulants: : Atomoxetine, raboxetine (NRI), alpha-2 agonist = Clonidine / Guanfacine

*DDC ↓ appetite*  
*NE ↑*

## Separation Anxiety Disorder:

- Intense fear of separation from home / caretaker
- > 4 y/o
- Symptoms > 4 wks children, > 6 mo adults

## Tourette's Syndrome:

- Presents before age of 18 → persists for > 1 yr
- Recurrent motor/vocal tics *Q//*
- Associated with ADHD/ OCD

Rx intractable tics: *D2 (-) : Haloperidol / Atypical AP*

## Gender identity begins to form at age 3 y/o

*GENDER DYSPHORIA QQ*

- Preference for dress & play activities of opposite gender
- Discomfort with anatomical organs of own sex
- "trapped in another sex's body"

' BAD PERSONS '

## Conduct Disorder (CD)

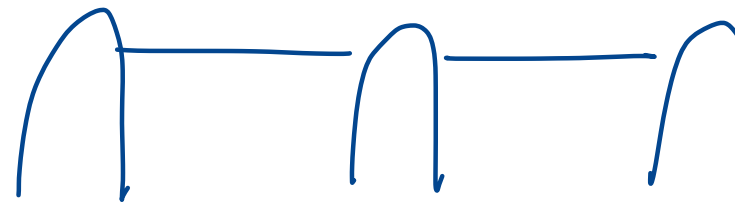
Persistent violation of societal norms or rights of others

## Oppositional Defiant Disorder (ODD)

Defiant, argumentative, and vindictive behaviour **toward authority figures** >6months

## Disruptive Mood Dysregulation Disorder (DMDD) <sup>ee</sup>

- After 6yrs, Before 10yrs
- Severe irritability + frequent temper outbursts
- Between outbursts: mood is **persistently irritable**/angry



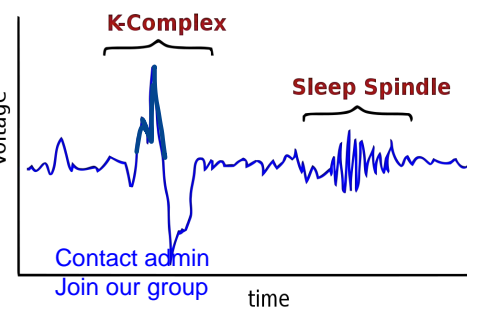
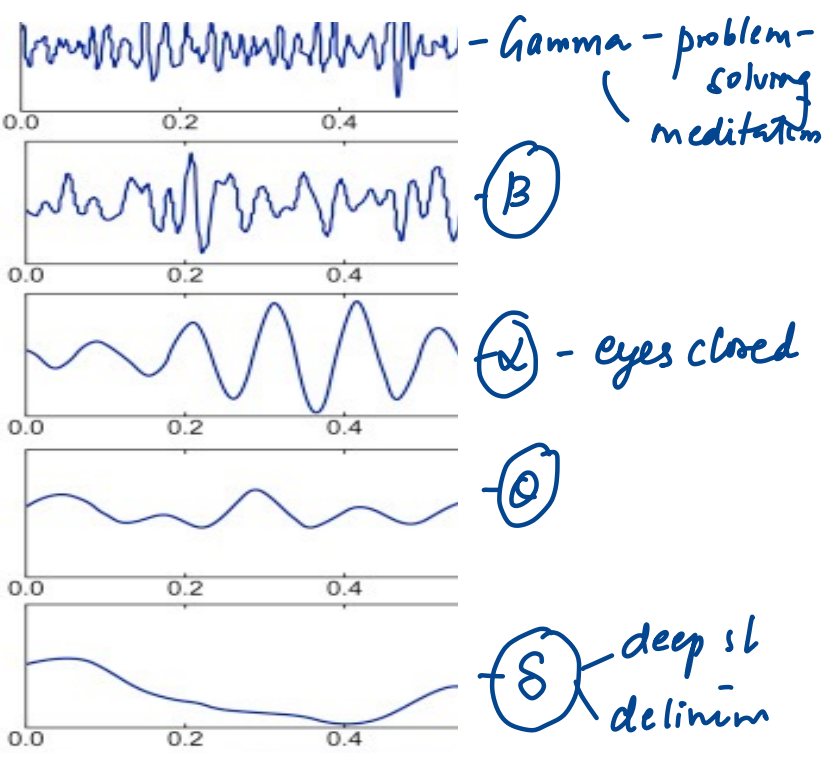
## Intermittent Explosive Disorder

- After 6yrs
- Sudden recurrent episodes of outbursts, out of proportion to provocation, provide relief, followed by remorse.
- Between outbursts: mood is **normal**



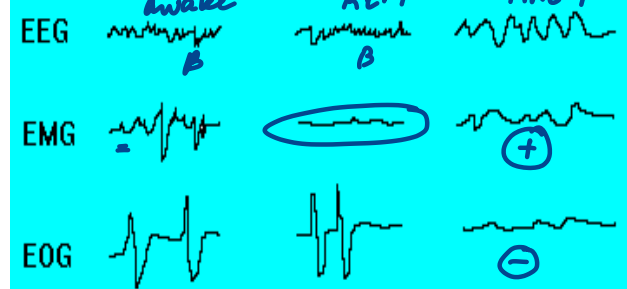
# Sleep and related disorders

Good B A T Dance



Photosensitive SCN → NE → Pineal Gland → ↑ Melatonin → Sleep

Awake (eyes open)	Beta	Parasomnias
Awake (eyes closed)	Alpha	
Stage N1 (5%)	Theta	
Stage N2 (45%)	Sleep spindles, K-complexes	Bruxism
Stage N3 (25%) [Restorative sleep]	Delta (deep)	• Bedwetting ✓ • Sleepwalking ✓ • Night terrors ✓ (x remember)
REM sleep (25%) Paradoxical	Beta, PGO, Sawtooth waves <i>penile tumescence</i>	- Memory processing No motor tone, ↑ Genital blood flow • Nightmares "remember" • PTSD (DOC-Prazosin)



	REM	NREM
ACh	↑	↓
5-HT, NE	↓	↑
GH	↓	(↑ - N3)
PRL	↑	↑

Reduced REM Latency: *Narcolepsy / Depression*  
Alcohol, BZD, Elderly : ↓ REM, ↓ N3

*NARCOLEPSY*

- Rapid-onset profound episodes of sleepiness
  - ≥ 3 times per week for ≥ 3 months *"sleep attack"*
  - ↓↓ REM latency – sawtooth waves
  - Hypnagogic/ -pompic hallucinations, Cataplexy *loss of motor tone*
  - ↓↓ Hypocretin / orexin from lateral hypothalamus
- Rx: *Modafinil*
- New: Pitolisant (H3 antagonist)
  - Solriamfetol (NDRI)

*Periodic limb movt Sx*  
Leg movement during sleep  
 DOC: BZD

*Restless leg Sx*  
 Restlessness during sleep, relieved on moving  
 DOC: *Gabapentin > Ropinirole*

Contact admin  
Join our group

INSOMNIA :

≥ 3 nights a week for ≥ 3 months  
 Mx: - Eliminate cause / *sleep hygiene*  
 - Zolpidem, Zaleplon, Zopiclone - *(x) dependence*  
 - Melatonin, Ramelteon *(Cl<sup>-</sup>)*  
 - Suvorexant, Daridorexant *orexin ↓*

*Klein - Levine* *Kluever Bucy*  
Hypersomnia, Hyperphagia, Hypersexuality + *memory loss*

Erectile dysfunction

Nocturnal intumescence + : *psychogenic*  
 MCC: *DM*  
 Mx: *PDE 5 ⊖ sildenafil (s/c) → PDE6 ⊖ : blue vision*  
*↳ ↓ BP ( x nitrate )*

Premature ejaculation

Mx: SSRI, Squeeze technique/ Stop-start technique/ Sensate focussing

Nocturnal enuresis

Urinary incontinence during sleep ≥ 2 times per week for ≥ 3 months in ≥ 5 years old  
 Mx: *void before bedtime* → *Alarm* → *Desmopressin / Imipramine*

# Somatization disorders

## UNINTENTIONAL

## INTENTIONAL

Illness anxiety D!  
Hypochondriasis

Somatic symptom D

Conversion / Functional neurological D

- Preoccupation of having DIAGNOSIS of serious illness
- No/ mild symptoms
- Consistently negative Ix  
6mow

- MC - Pain
- Excessive preoccupation with 1 or more symptoms
  - Stressor +  
6mow

- Unexplainable neurological d/o <sup>S2/ paralysis</sup>
- Stressor +
- La Belle Indifference
- Astasia abasia

Malingering

Secondary gain

Stressor

+

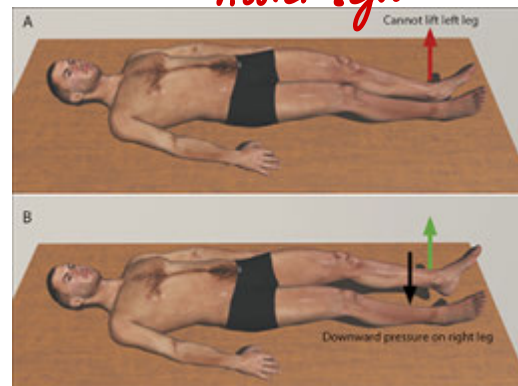
-

Munchausen/  
Factitious D

-  
"side role"

-

Hoover sign



'by proxy'

# Psychotherapy

Type	Goals	Indication
<b>Cognitive Behavioral Therapy (CBT)</b> <u>Aaron Beck</u>	- Beck's cognitive triad : <u>hope</u> / <u>help</u> / <u>worth</u> <i>maladaptive</i> Automatic negative thought, <u>Dysfunctional beliefs</u> , Cognitive distortions (' <i>schema</i> ')	✓ - Depressive disorders - <i>TOC</i> - Anger disorders ✓ - Anxiety disorders - <i>TOC</i> ✓ - Trauma disorders ( <u>PTSD</u> ) <i>TOC</i> <i>EMDR (eye not densest &amp; rep)</i>
<b>Interpersonal Therapy</b>	- Helps with relationship building	- Disorders of Early Development
<b>Motivational Interviewing</b>	- Employs transtheoretical model of change	- <u>Substance misuse</u> - Weight loss - Medication adherence
<b>Supportive Therapy</b>	- Provides emotional support & empathy - Employed during stressful life events	- <u>Grief</u> - Brief hardship/ <u>crises</u> - <u>Low motivation</u> - <u>Low IQ</u>

# MISCELLANEOUS

## NEUROIMAGING IN PSYCHIATRY

- **Autism:** ↑ ↑ Total Brain volume
- **Schizophrenia:** ↑ ↑ Cerebral Ventricles *Q/*
- **Obsessive-Compulsive disorder:** Abnormalities in Orbito-Frontal Cortex & Striatum
- **Panic disorder:** ↓ ↓ volume of Amygdala & Left Temporal lobe
- **PTSD:** ↓ ↓ Hippocampal volume

*cut angry  
guilty eye open*

CAGE, AUDIT: Alcohol abuse

SCOFF: Eating D<sup>Q</sup>

PANSS: Schizophrenia

Confusion assessment method (CAM): Delirium

SPIKES: breaking bad news

HEADSS: adolescents

PEARLS: build rapport

PANDAS: Pediatric AI Neuropsych D ass 2 Step 6/7 A

# TIMELINES in a Nutshell !

Brief psychotic disorder  $< 1m$   
 Schizophreniform  $1-6mon$   
 Schizophrenia  $6mon$   
 Schizoaffective  $\geq 2wks - schizophrenia (x mood)$   
 Delusional disorder  $> 1mon$

Depression  $> 14d$   
 Bipolar disorder / Mania  $> 7d$   
 Hypomania  $> 4d$   
 Persistent depressive disorder (Dysthymia, Cylothymia)  $> 2yrs$

OCD  $> 2wks$   
 Panic disorder  $> 1mon$   
 GAD  
 Phobia  $\} > 6mon$

Acute stress reaction  $< 1mon$   
 PTSD  $> 1mon$   
 Adjustment disorder  $< 6mon$  resolves

Eating disorder  
 Narcolepsy  
 Insomnia  
 Nocturnal enuresis  $\} 3mon$   
 $\} \geq 5yrs$

Selective mutism  
 Separation anxiety  $\} \geq 1mon$

Oppositional defiant disorder  
 Specific learning disability  
 ADHD  $6 \times 2 = 12$   $\} \geq 6mon$

Tourette disorder  
 Disruptive mood regulation disorder  $\} \geq 1yr$

# Gender summary

♀ ↑

**Rett**  
Rapid cycling bipolar  
Depression  
**BPD 2**  
GAD  
Panic disorder  
Borderline PD  
Conversion D  
OCD

♂ → ↑

**Autism**  
Antisocial PD  
**ADHD**

♂ → = ♀

**Schizophrenia**  
**BPD 1**

# PSYCHOLOGY

**TRANSFERENCE:** Patient to Doctor

**COUNTER-TRANSFERENCE:** Doctor to Patient

TRANS-THEORETICAL MODEL OF CHANGE	
Stage	Substance Use Disorder
1. Precontemplation	
2. Contemplation	
3. Preparation	
4. Action	
5. Maintenance	
6. Relapse / Termination	

"Sense of Relief"

Catharsis: "venting out"  
Abreaction: Abnormal reaction

"Reliving/ Re-Experiencing memory"

## Freud's structural theory of mind

Pleasure ID Reality EGO Morals SUPER-EGO



**Psychoanalysis:** Theory of Free association



**Parapraxis:**  
Slip of tongue

## Piaget's Staging:

<b>Sensorimotor Stage</b> 	<ul style="list-style-type: none"> <li>&lt; 2 yrs</li> <li>Object permanence (9-12 mo)</li> </ul>
<b>Preoperational Stage</b> 	<ul style="list-style-type: none"> <li>2-7 yrs</li> <li>Symbolism</li> <li>Ego-centric</li> </ul>
<b>Concrete Operational Stage</b> 	<ul style="list-style-type: none"> <li>7-10 yrs</li> <li>LOGIC</li> </ul>
<b>Formal Operational Stage</b> 	<ul style="list-style-type: none"> <li>&gt; 10 yrs</li> <li>ABSTRACT</li> </ul>

## Projective Tests

**Rorschach Ink Blot**

**Thematic Appreciation Test**



(Tests tell about unconscious intentions)

Minnesota Multiphasic Personality Inventory

**Objective Test**

## Maslow's Hierarchy of "Needs"



# DEFENCE MECHANISMS

## MATURE: <SAASH>

- An athlete focuses on other tasks to prevent worrying about an important upcoming match → **Suppression**
- A 40 year old anxious about getting old starts planning details of his retirement → **Anticipation**
- A mafia boss makes a large donation to charity → **Altruism**
- Two nervous medical student jokes about the viva that went horribly → **Humour**
- A very short-tempered person takes up kick-boxing as a hobby → **Sublimation**

## NARCISSISTIC <DPS>

- A mother refuses to admit the death of her child and insists he will be back in the morning. → **Denial**
- A man who wants to cheat on his wife accuses his wife of being unfaithful. → **Projection**
- A patient says that all the nurses are cold and insensitive, but the doctors are warm and friendly. → **Splitting** →  
(Borderline personality)

## IMMATURE :

- A previously toilet-trained child begins bedwetting again following the birth of a sibling. → **Regression**
- A college student continues to suck her thumb when studying for stressful exams. → **Fixation**
- Throwing a book or punching on wall after a fight → **Acting out**
- A disgruntled employee is repeatedly late to work, but won't admit it is a way to get back at the manager → **Passive aggressive**

## NEUROTIC:

- A 20-year-old does not remember going to counselling during his parents' divorce 10 years earlier → **Repression**
- (PRIMARY DEFENCE MECHANISM)
- A patient just diagnosed with cancer discusses the detailed pathophysiology of the disease. → **Intellectualisation**
  - An employee who was recently fired claims that the job was not important anyway. → **Rationalisation**
  - After being reprimanded by her principal, a frustrated teacher returns home and criticises her husband's cooking → **Displacement**
  - A stepmother treats a child she resents with excessive nurturing and overprotection → **Reaction formation**
  - Husband bringing gift for wife after fighting previous day → **Undoing**
  - A child who is a victim of physical abuse discusses the beating without any emotions → **Isolation of affect**
  - A patient boasts about his physician and his accomplishments while ignoring any flaws. → **Idealisation**

## OCD:

**D-Displacement**

**U-Undoing**

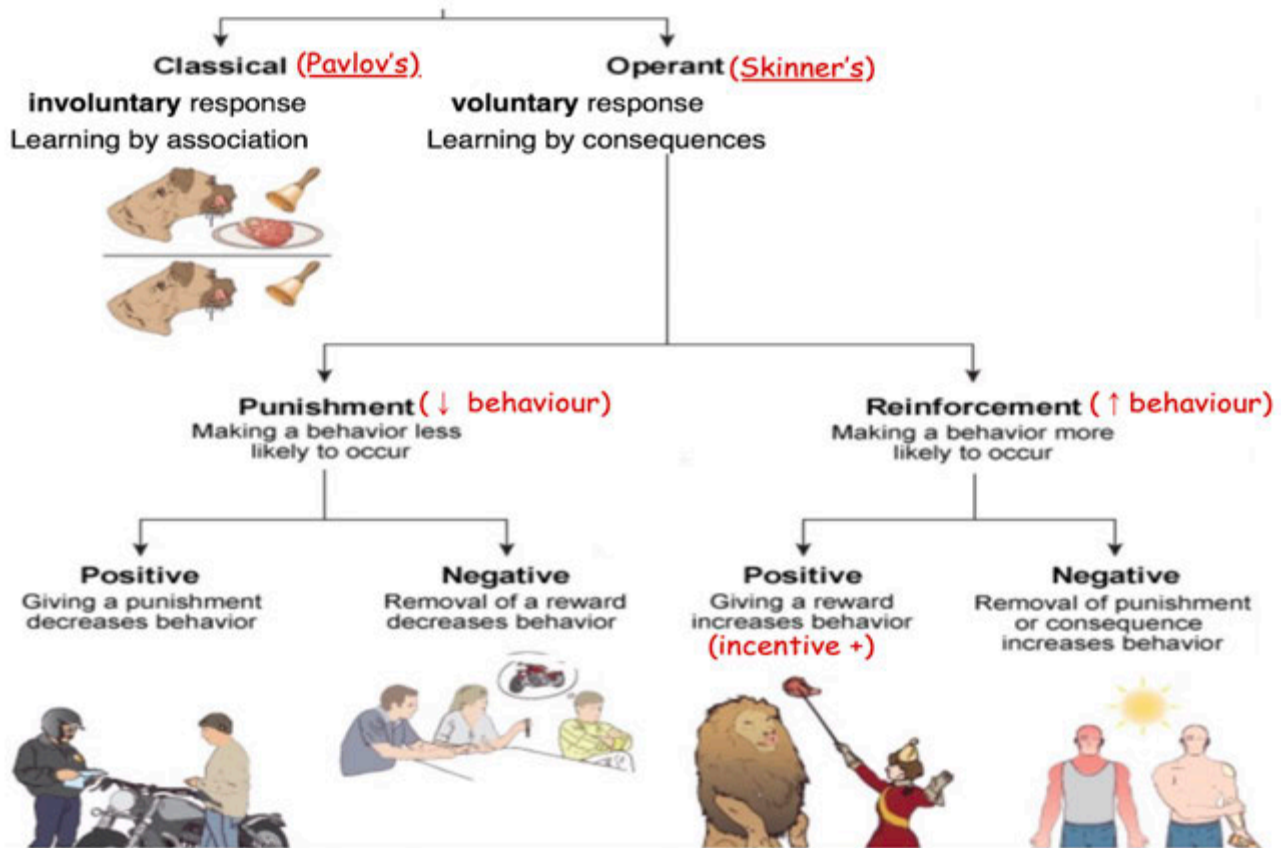
**R-Reaction formation**

**I-Inhibition**

**I-Isolation of affect**

**EXTINCTION** : Discontinuation of reinforcement eventually eliminates behaviour

# BEHAVIORAL CONDITIONING



# General Psychiatry - MENTAL STATE EXAMINATION

## PERCEPTION

<b>Hallucination:</b>	VS	<b>Illusion:</b>
No Stimulus		Stimulus +
True Hallucinations		Pseudo- Hallucinations
-Outer, Objective		-Inner, Subjective

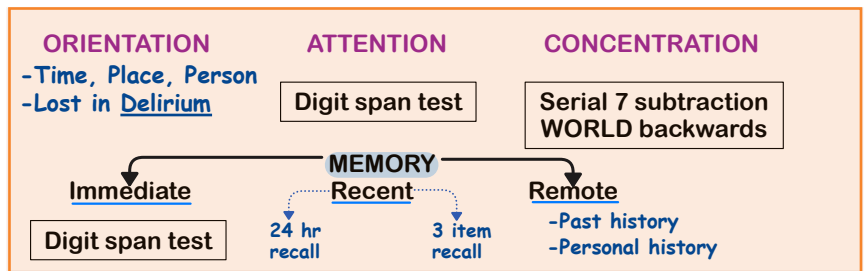
- Auditory → Psychosis: schizophrenia
- Visual → Medical illness (delirium, drugs)
- Tactile → Cocaine abuse → **Magnan Bugs**
- Olfactory / gustatory → Temporal lobe epilepsy

-Reflex hallucination/ Synesthesia: **LSD**  
 Stimulus in one sense → Perception in different sense

-Functional hallucination:  
 Stimulus in one sense → Perception in same sense

**Mood** - Over a period of time


**Affect** - Cross-sectional: by Examiner → "Labile", "Flat"



## GRADES OF INSIGHT

- 1-Complete denial
- 2-Slight awareness
- 3-Awareness + Blame on others
- 4-Intellectual insight
- 5-True emotional insight - Future behaviour

Proverb testing  
 Similarity assessment } ABSTRACT  
**JUDGEMENT** :  
 What to do in a fire? -Test  
 Future planning -Personal  
 Behavior in meeting -Social

Mini-Mental State Examination (MMSE)		
Name John Williams	Date Feb 21, 2023	
Instructions: Ask the questions in specified sequence and give one point for each correct response for each question or task.		
Questions	Maximum Score	Patient's Score
1. "What year is this?" "What is the current season?" "What month is this?" "What's the date today?" "What day of the week it is?" (Score 1 point for each correct answer.) → Time	5	3
2. "Which country are we in right now?" "What state/province are we in?" "What city or town are we in?" "What city or town are we in?" "What's the street address of your home / What's the name of this building?" "On which floor are we located / In which room are currently located?" (Score 1 point for each correct answer.) → Place	5	4
3. "I'm going to name three words/objects and you need to repeat them. Then remember them because I'm going to ask you to name them again later." (EX: BALL - CAR - MAN / APPLE - PENNY - TABLE) (Naming) (Recent memory)	3	2
4. "Spell WORLD backwards" Answer: D-L-R-O-W → Concentration	5	4
5. "Now, name the three objects/words I asked you to remember." (Give one point for each.) Recent mem	3	3
6. "What object is this?" Show a wrist watch. Naming	1	1
7. "What object is this?" Show a pencil. Naming	1	0
8. "Repeat this phrase: No ifs, ands, or buts."	1	1
9. "Read the words and then do what it says." (Give the patient/client a sheet of paper with CLOSE YOUR EYES written on it.) Comprehension	1	1
10. "Take the paper in your right/left hand, fold it in half, and put it on the floor." (Give the patient/client a piece of paper and score 1 for each action taken.) Command	3	3
11. "Make up and write a complete sentence on a piece paper." (Sentence must contain a verb.) Language	1	1
12. "Copy this design, please." Visuo-Spatial 	1	1
<b>TOTAL:</b> < 24 out of 30 → COGNITIVE Decline	30	24

- Levels of consciousness:
- Alert
  - Lethargy = Somnolence
  - Oneroid- dream-like/ hallucinations
  - Obtundation
  - Stupor = Akinetic mutism
  - Coma

## Delirium vs Dementia

Delirium	Dementia
Hallmark is <i>impaired consciousness</i>	AMNESIA - Memory APHASIA - Speech APRAXIA - Learned tasks AGNOSIA - Objects
<ul style="list-style-type: none"> <li>• Acute medical illness</li> <li>• Autonomic dysfunction</li> <li>• Abnormal EEG → Delta waves</li> <li>• Carphologia/floccillation (picking at covers/ clothes)</li> <li>• Illusion, delusion</li> <li>• Sundowning (worse at night)</li> <li>• Develops quickly</li> <li>• Fluctuating course with lucid intervals</li> </ul>	

**Mx:**

- Treat underlying cause
- Avoid restraints
- give Antipsychotics (if needed)

**C/I:** BZD (except Alcohol withdrawal)

# Thought Disorders

Stream	Content	Possession	Form
<ul style="list-style-type: none"> <li>• Flight of ideas</li> <li>• Pressure of speech</li> <li>• Thought retardation/block</li> <li>• Circumstantiality</li> <li>• Prolixity</li> <li>• Clang</li> </ul> <p>"I'm fine, dine, shine, all the time."</p> <ul style="list-style-type: none"> <li>• Perseveration</li> </ul> <p>What's your name? What do you do? What is your birthdate?</p> <ul style="list-style-type: none"> <li>- Palilalia - word</li> <li>- Logoclonia - Last syllable (Banananana)</li> </ul>	<p><b>Delusion</b></p> <p>↓</p> <p>false, fixed, unshakable belief</p>	<p>'Someone is putting thoughts in my mind' <b>Insertion</b></p> <p>'Someone is taking away my thoughts' <b>Withdrawal</b></p> <p>'Thoughts escape my mind, &amp; others can access them' <b>Broadcast</b></p> <p>Obsessions (<b>ego-dysotonic</b>)</p>	<ul style="list-style-type: none"> <li>• Derailment</li> <li>• Loosening of association</li> <li>• Tangentiality</li> <li>• Neologism</li> <li>• Incoherence = word salad</li> </ul>

## Delusional disorder

- MC delusion: **Persecution**
- Folie a deux: **Shared delusion**
- Misidentification-**
- Capgras- "oh crap"
- Fregoli- "Family giving goli"



Fregoli syndrome

- DeClerembaut syndrome- **Erotomania**
- Othello syndrome- **Morbid jealousy** → Alcohol
- Cotard syndrome- **Nihilistic delusion**
- Ekbom syndrome- **Delusional parastiosis**

Q: A doctor asks a patient " How old are you? " The patient replies: "you know doctor, i grew up in a small village, married at 12. My husband is 5 years older. I had two children. Now i take care of my grandchildren too, anyway... I'm 38 years old." What thought disorder is this ?

- A) Tangentiality                      B) Derailment                      C) Circumstantiality                      D) Flight of ideas

# Personality disorders

- Inflexible, maladaptive patterns of behaviour- Ego-syntonic
- Usually present by early adulthood

Cluster A personality disorders (↑ Psychotic ds)
Pervasive distrust, Suspiciousness
Voluntary social withdrawal, Content with social isolation (vs avoidant)
Odd beliefs or Magical thinking

Paranoid PD

Schizoid PD

Schizotypal PD

## Personality traits:

- Openness
- Conscientiousness
- Extroversion
- Agreeableness
- Neuroticism

Cluster B personality disorders (↑ Substance use)
Criminality, Impulsivity, Hostility 18 years old
Unstable interpersonal relationships, Impulsivity, Suicidality Females > Males Splitting, Dialectical BT
Attention-seeking, Dramatic speech & emotions
Grandiosity, Sense of entitlement, Require excessive admiration

Antisocial PD

Borderline PD

Histrionic PD

Narcissistic PD

## Conduct disorder

- Animal cruelty
- Fire setting
- Bed wetting

(MacDonald Triad)

Cluster C personality disorders (↑ Anxiety)
Hypersensitive to rejection & criticism, Socially inhibited
Preoccupation with order, perfectionism, & control; Ego-syntonic
Excessive need for support, Low self-confidence

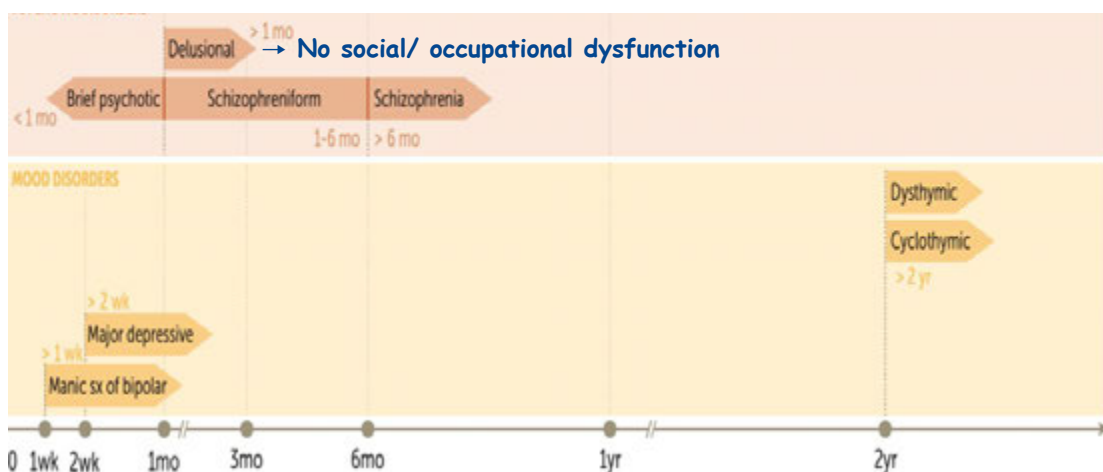
Avoidant PD

OCPD/ Anankistic PD

Dependent PD

# Psychotic disorders

→ Judgement, Reality, Insight, Personality → ( J R I P ) lost



# Schizophrenia

## DSM-5 Criteria for Schizophrenia $\geq 6$ months

- $\geq 2$  symptoms must be present for  $\geq 1$  month & at least one symptom must be either (1), (2), or (3):
  1. **Hallucinations**
  2. **Delusions** (Can be either bizarre or non-bizarre)
  3. **Disorganised speech** (e.g., frequent derailment or incoherence)
  4. Grossly disorganised or catatonic behaviour
  5. Negative symptoms (e.g., affective flattening, alogia or avolition)
- Continuous disturbance for **6 months**
- **Social or occupational dysfunction** for significant portion of the time

## Neuroimaging:

loss of cortical tissue volume with ventricular enlargement

## Eugene Bleuler: 'Schizophrenia'

Autism if  $A=B$  &  $B=C \rightarrow A=C$   
 Ambivalence  
 Affective flattening  
 Association lost

## Schneider's FRS:

3 auditory hallucinations: 1st, 2nd, 3rd person  
 3 made phenomenon-impulse, volition, affect  
 3 thought process  
 Somatic passivity  
 Delusional perception

GOOD PROGNOSTIC FACTORS	BAD PROGNOSTIC FACTORS
Acute onset or abrupt onset	Insidious onset
Advanced age at onset (>35 yrs) Except:	Early onset (<20 yrs)
Catatonic, paranoid subtype	Simple, disorganised, hebephrenic
Female sex	Male sex
Prominent positive symptoms	Prominent negative symptoms
Presence of affective symptoms	Absence of affective symptoms
Family history of mood disorders	Family history of schizophrenia
-	Premorbid PD/ stressor/ neurodev delay

General Prevalence: 1%  
 One parent, Dizygotic twin: 12%  
 Both parents: 40%  
 Monozygotic twin: 47%

DiGeorge syndrome  
 Heavy cannabis use  
 Downward drift hypothesis: Low SES  
 Advanced paternal age

# Antipsychotics

Mesolimbic → +ve symptoms

Nigrostriatal → EPS

Pathways involved: D2 ⊖ Tubero-Infundibular → ↑ PRL

## Typical (1<sup>st</sup> gen)

Haloperidol, Fluphenazine (↑ Potency) → ↑ EPS

Thioridazine, Chlorpromazine (↓ Potency) → H, M, α<sub>1</sub> ⊖ → Sedation, Hypotension

Atypical (2<sup>nd</sup> gen) → 5-HT<sub>2A</sub> ⊖ → +ve & -ve Symptoms; 5-HT<sub>2c</sub> ⊖ → Weight gain

Clozapine (D<sub>4</sub> >> D<sub>2</sub>), Olanzapine, Quetiapine, Ziprasidone, Risperidone (Max D<sub>2</sub> ⊖ out of atypical antipsychotics)  
3<sup>rd</sup> gen. (Aripiprazole/ Cariprazine) → Partial D<sub>2</sub> Agonist

Extra-Pyramidal Symptoms		Treatment
Acute Dystonia (hrs)	Sudden, sustained contraction Torticollis, Trismus, Oculogyric crisis	<u>Anticholinergics</u> : Benztropine/ Promethazine/ diphenhydramine/ Trihexyphenidyl
Akathisia (d - wks)	Subjective restlessness, Inability to sit still Most common	β - Blockers → BZD
Parkinsonism (wks -mo)	<u>Gradual</u> -onset tremor, rigidity, bradykinesia	Anticholinergics
Tardive Dyskinesia (mo - yrs)	Dyskinesia of mouth, face, trunk, extremities Rabbit syndrome	<ul style="list-style-type: none"> <li>• STOP antipsychotic</li> <li>• Anticholinergic C/I</li> <li>• VMAT ⊖ → Valbenazine</li> </ul>
Neuroleptic Malignant Syndrome	Fever, muscle rigidity, CPK high	<ul style="list-style-type: none"> <li>- STOP antipsychotic</li> <li>- Dantrolene Sodium</li> </ul>

-Max EPS : Haloperidol (Atypical: Risperidone)

-Min EPS, DOC for refractory psychoses: (>2 Antipsychotics - 1 is Atypical): Clozapine

-Max metabolic S/E, Sialorrhea, Seizure, Myocarditis, Agranulocytosis: Clozapine  
(Wet Pillow) (Idiosyncratic)

-QT prolongation: Haloperidol/ Ziprasidone/ Quetiapine/ Thioridazine

-Min weight gain: Ziprasidone

-Retinal pigmentation: Thioridazine

-Vortex keratopathy, Cholestatic jaundice: Chlorpromazine

-Cataract: Quetiapine

-PD induced psychosis DOC: Pimvanserin

-Technique for depot injections: Z-technique

-Longest acting: Penfluridol

-TOC/ Depression + suicide / stupor : ECT (Indirect)

[Anaesthetic agent of choice: Methohexital ]

### Duration of treatment:

- 1 episode: 2 years.
- 2 episodes: 5 years.
- 3 episodes: life-long.

### Monitoring of clozapine:

- WBC <3000, ANC <1500
- Once / week: 6mon
- Once/2 weeks: 6mon
- Once/ month: >1yr

## CATATONIA :

Stupor - **Akinetic Mutism**

Waxy flexibility - **Sets like a candle**

Negativism - **Initially Resists movement**

Automatic obedience - **Follows examiner**

Catalepsy - **Passive**

Posturing **Active**

**Mannerism** - Purposeful

**Stereotypy** - Non-Purposeful

**Echolalia** - repeat words

**Echopraxia** - repeat actions

**Grimacing** - Facial expressions

**Ambitendency** - Back & forth

-**DOC**: BZD (Lorazepam)

-**TOC**: ECT (Indirect)



## Mood disorders

**Hypomania** :  $\geq 4$  days  
X hospitalisation

**DEPRESSION (MDD)**:  $\geq 14$  days

Depressed mood +

Sleep ↓  
Interest deficit  
Guilt  
Energy deficit  
Concentration deficit  
Appetite  
Psychomotor retardation  
Suicidality

$\geq 4$  out of 8



Veraguth fold

Mood reactivity, Hypersomnia, Hyperphagia  
Leadren paralysis  
Avoid TCA  
Rx: SSRI/ MAO ⊖

→ **Atypical Depression**

### Schizoaffective disorder

Concurrent mood episode, active-phase symptoms of schizophr. +  
at least 2-week lifetime h/o delusions or hallucinations in the  
absence of prominent mood symptoms

-: MDD with Psychotic Features → **Mood Congruent**

**Dysthymia/ chronic depression**:  $\geq 2$  years

**Double depression**: Dysthymia + MDD

**Acute Mania** :  $\geq 7$  days

Distractibility  
Irresponsibility  
Grandiosity  
Flight of ideas  
Activity increased  
Sleep decreased  
Talkativeness

**BPD-I**

Mania + /- Depression

**BPD-II**

Depression + Hypomania

**RAPID CYCLING Disorder**

R/E: Female, Hypothyroid,  
Substance abuse, BPD 2

**Diagnosis**:  $\geq 4$  cycles per year

# Postpartum disorders

FDA approved: **Brexanolone (IV), Zuranolone (Oral)**

## PP Blues

## PP Depression / MDD with peripartum onset

## PP Psychosis

<b>Onset</b>	2-3 days (resolves within 10 days)	Within 4 weeks	Variable
<b>Symptoms</b>	Mild depression, tearfulness, irritability	SIGE CAPS	Delusions, hallucinations, thought disorganization
<b>Treatment</b>	Reassurance & monitoring	Antidepressants, psychotherapy (CBT)	- Antipsychotics, Antidepressants - Do not leave mother alone with infant

**Grief:** Sadness, Guilt, Visual & auditory hallucinations, Suicidal ideation absent

**Delayed grief:** >2 weeks after triggering event

**Grief > 12 months:** Chronic grief/ Persistent complex bereavement disorder

**Stress:** Test of resource → forces a reaction/ response

**Burnout:** Detachment / Ineffectiveness/ Exhaustion

**Stages of Grief:** Given by- **Ross- Kubler**



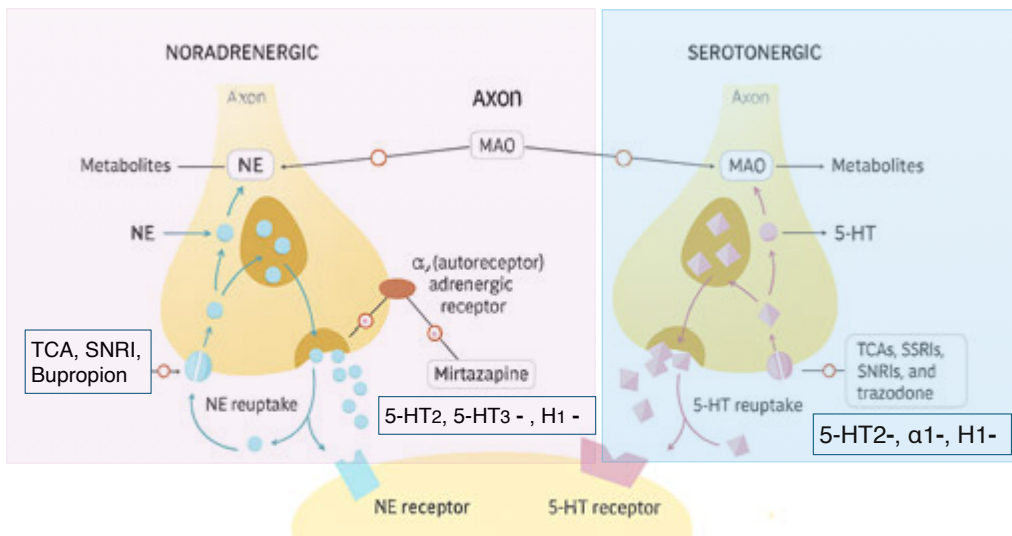
# Suicide

- Sex (male, LGBTQ)
- Age
- Depression
- **Previous attempt (highest risk factor)**
- Ethanol or drug use
- Rational thinking loss (psychosis)
- Sickness (medical illness)
- Organised plan
- Stated future intent
- No spouse or other social support

- MCC of suicide overall: **Mood Disorder** >> Schizophrenia
- MC mode: **Hanging**
- 5-HIAA CSF: ↓
- **-Non-Suicidal Self-Injury Behaviour**
- **- PARASUICIDE (NSSI): -Borderline PD**
- **- COPYCAT SUICIDE: "Trigger warning"**
- **- Paradoxical suicide/**
- **Black box warning for anti-depressants:**
- **" Monitor young adults on antidepressants closely "**

# Antidepressants → ↓ 5 HT, ↓ NE, ↓ Dopamine

- Takes 4–8 weeks for antidepressants to show effect
- **Continuation-phase treatment:** 6 months
- **Maintenance for 1-3 years:** high risk of recurrence or persistent residual depressive symptoms
- **Maintenance treatment indefinitely:** 3 or more lifetime episodes, chronic episodes for 2 or more years, strong family history, or severe episodes (suicidal attempts)



**SSRI (1st line)**

Fluoxetine, Fluvoxamine, Paroxetine, Sertraline, Escitalopram, Citalopram.

**SNRI (Severe disease)**

Venlafaxine, Duloxetine, Milnacipran

**TCA**

Amitriptyline (3), Nortriptyline (2), Imipramine, Desipramine, Clomipramine, Doxepin, Amoxapine.

**MAO ⊖**

Tranylcypromine, Phenelzine, Selegiline (selective MAO-B inhibitor) → Rx: PD

**SPARI**

Inhibit serotonin reuptake, Partial agonist at 5HT1α : **Vilazodone**  
+ antagonist at 5HT3 : **Vortioxetine**

Acute S/E: GI

-MC S/E of SSRI: <b>Chronic S/E : Sexual (↓ Libido, Delayed Ejaculation)</b>
-SIADH, Vivid dreams, Dry mouth, Sweating: <b>SSRI</b>
-S/E: Hypertension, Discontinuation syndrome, Use in fibromyalgia/neuropathy <b>SNRI</b>
-Min sexual S/E: <b>Mirtazapine (S/E: Sedation)</b>
-Min weight gain, sedation, sexual s/e, can cause seizures in Bulimia/ Alcoholics, Anti-smoking: <b>Bupropion (NDRI)</b>
<b>vs Bupirone: Anti-Anxiety (5-HT1A +)</b>
-Priapism, Sedation: <b>Trazodone</b>
-Respiratory depression, hyperpyrexia, prolonged QT, convulsions, cardiotoxicity : <b>TCA</b>
<b>DOC: Sodium Bicarbonate</b> (QRS > 100 ms) <b>Hemodialysis: NO role</b> (Na blocking)
-Antidepressant of choice in pregnancy: <b>Sertraline</b> Most teratogenic: <b>Paroxetine</b>
-Drugs with anti-suicide ability : <b>Lithium, Clozapine, Esketamine (Resistant)</b>
-Clonus, Diarrhea, Altered Mental Status on antidepressants St. John's wort, Opioids, Linezolid : <b>Serotonin Syndrome</b> (Tramadol)
<b>DOC: Cyproheptadine</b>
-MAO-i with Tyramine : <b>CHEESE Reaction</b> → <b>Hypertensive Crisis</b>
<b>DOC: Phentolamine (Reversible α ⊖)</b>

# Mood stabilisers

DOC in bipolar disorders: **Lithium**

- Affects neurotransmission
- Affects second messenger systems
- Neuroprotection

DOC Acute mania :Li + **Atypical Antipsychotics**

DOC in rapid cyclers- **Valproate**

DOC in pregnancy- **Atypical Antipsychotic**

**Levels:**

Prophylaxis- **0.5 - 0.8 mEq/L**

Acute Mania- **0.8 - 1.2**

Toxicity- **> 1.5**

Dialysis- **> 4 / Symptomatic**

T<sub>1/2</sub>: **24 hrs**

Measurement : **-5 days after initiation**  
**-12 hr after last dose**

## Adverse Effects of Lithium

- Tremors (**MC**)
- Nephrogenic diabetes insipidus  
DOC: **ENaC ⊖ (Amiloride)**
- Thyroid dysfunction
- Hyperparathyroidism
- Acne, Psoriasis
- Weight gain
- Leukocytosis
- Teratogenic: **Ebstein Anomaly**  
**-Atrialization of RV (BOX heart)**

## Li TOXICITY

R/F:

- Volume loss/ AKI
- Nausea, vomiting
- ACE inhibitors
- Thiazides
- NSAIDs

CF:

- Slurred speech
- Hyperreflexia
- Seizures, Ataxia

Q: A 28 year old female patient diagnosed with depression was started on Imipramine. After 2 weeks the relatives notice new symptoms. The patient has become excessively cheerful, overly excited, wearing colourful clothes, and talking excessively. What is the most appropriate next step in management ?

A) Continue imipramine & add BZD

D) Continue imipramine & add Antipsychotic.

B) Stop Imipramine & start an Antipsychotic

D) Stop Imipramine & add Sodium Valproate

# Anxiety-related disorder

## **DSM-5 Criteria for Generalized Anxiety Disorder** (Free-Floating Anxiety + +)

Excessive anxiety & worry, occurring more days than not for  $\geq 6$  months, about a number of events or activities

Anxiety & Worry are associated with  $\geq 3$  of the following symptoms:

- Restlessness or feeling keyed up or on edge
- Being easily fatigued
- Difficulty concentrating or mind going blank
- Irritability
- Muscle tension
- Sleep disturbance

**Rx:**

-SSRI

-5-HT<sub>1A</sub> +

-CBT

## **Social Anxiety Disorder:**

- Fear of embarrassment or poor performance in social or work settings for  $\geq 6$  months
- Social setting type:- Parties, dating, public restrooms
- Performance type:- Work meetings, presentations, speeches

# Panic disorder and Phobia

## **DSM-5 Criteria for Panic Disorder**

- Recurrent unexpected panic attacks
- At least one of the attacks has been followed by at least **1 month** of one or more of the following:
  1. **Persistent concern about having additional panic attacks**
  2. Worry about the implications of the attack or its consequences
  3. A significant change in behaviour related to the attacks
  4. Presence or absence of **agoraphobia** (**Fear of spaces from where escape is difficult**)

*The panic attacks are **not** due to the direct physiologic effects of a substance (e.g., medication or drug of abuse) or a general medical condition (e.g., hyperthyroidism).*

## **DSM-5 Criteria for Phobia**

- Marked and **out of proportion fear** within an environmental or situational context to the presence or anticipation of a specific object or situation.
- The avoidance, anxious anticipation, or distress in the feared situation(s) interferes significantly with the child's normal routine, academic functioning, or social relationships.
- The symptoms must have a duration of at least **6 months**.
  - ▶ Acrophobia: **Heights**
  - ▶ Ailurophobia: **Cats**
  - ▶ Cynophobia: **Dogs**
  - ▶ Trypanophobia: **Needles**
  - ▶ Mysophobia: **Germs**

**Rx:** Systematic Desensitization

# OCD related disorders

**DSM-5 Criteria for OCD** : Symptoms for  $\geq 2$  wks

**Obsessions are:** MC is Contamination

Recurrent & persistent thoughts, urges, images that are experienced as **intrusive & unwanted**, & that in most individuals cause marked anxiety or distress  
(Ego-Dystonic)

**Compulsions are:** MC is Checking

**Repetitive behaviours** or mental acts that the individual feels driven to perform in response to an obsession

•The obsessions & compulsions are time-consuming or cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Rx - CBT (Exposure & Response Prevention)

## OCD-Related Disorders

- Hoarding disorder
- Body dysmorphic d/o
- Olfactory reference d/o
- Body focused repetitive behavior d/o:
  - Trichotillomania
  - Excoriation d/o

## Impulse-control disorders:

- Pyromania -Setting fire
- Kleptomania -Compulsive stealing
- Satyriasis/nymphomania -Sexual
- Intermittent explosive disorders

# Stressor-related disorders

## Adjustment Disorder:

- Distress, sadness, outbursts
- Symptoms begin within 3 months of stressor but subside before 6 months

→ EMOTIONAL stressor

## Acute Stress Disorder:

Symptoms lasting <1 month after event

## Post Traumatic Stress Disorder (PTSD):

- Life threatening or intense trauma
  - Sense of threat – Persistent feelings of danger, hypervigilance, exaggerated startle response
  - Avoidance – Efforts to avoid distressing memories, thoughts, or external reminders
  - Re-experiencing – Intrusive memories, flashbacks, nightmares
- Symptoms lasting >1 month after event

→ Life-Death situations

# Eating disorders

MC eating disorder: Binge eating disorder

3 or more months	<b>Anorexia</b> (Purging/Restrictive)	<b>Bulimia</b> Recurrent bingeing - purging
<b>BMI</b>	< 18.5	Normal / ↑
<b>Distorted body image</b>	++	-
Amenorrhea Osteoporosis Suicide	++	-
Parotitis, Tooth decay Hypo Cl <sup>-</sup> , K <sup>+</sup> Metabolic alkalosis Mallory Weiss syndrome	-	++

**Rx:** Nutritional rehab +  
Atypical Antipsychotics

**SSRI**



Russell Sign

Refeeding syndrome: ↓ K, Mg, PO<sub>4</sub>

# Dissociative disorders

Stressor +

## **Dissociative Amnesia**

Reversible, patient aware & distressed by memory loss

## **Dissociative fugue**

Amnesia for personal identity, not confused

**Depersonalisation:** Feeling detached from oneself

**Derealisation:** Feeling detached from the surroundings

} " As if " phenomenon

*Reality testing intact*

## **Dissociative Identity Disorder:**

Having two or more distinct personalities each with distinct Personality traits, Memories, Behaviour

**Ganser syndrome-** Seen in prisoners

- Vorbeireden : Pseudo-Stupidity / Approximate Answers

# Childhood psychiatry

## AUTISM SPECTRUM DISORDER

- Onset <3yrs
- Social interaction impaired
- Repetitive behaviours, Narrow interests,  $\pm$  IQ
- +/- Language delay
- Speech preserved: **Asperger's syndrome**  
**RETT syndrome (XLD)**
- Regression in girl >6 mon - 3yrs: **Microcephaly, Stereotypy**  
Gene: **MECP-2** Rx: **Trofinetide**
- Regression in any gender >2yrs: **Childhood Disintegrating/ Heller's syndrome**

## Separation Anxiety Disorder:

- Intense fear of separation from home / caretaker
- > 4 y/o
- Symptoms >4 wks children, >6 mo adults

## Tourette's Syndrome:

- Presents before age of 18 → persists for > 1 yr
- Recurrent motor/vocal tics
- Associated with ADHD/ OCD

Rx intractable tics: **D2** ⊖ : **-Haloperidol**

-Atypical antipsychotic

## ADHD (Previous: Minimal brain dysfunction)

More in boys; R/o conduct disorder  
6 X 2=12 [ > 6 mo at 2 settings before 12 yrs of age]

- <6yrs: Behavioural therapy
- >6yrs: **Stimulants** ( $\downarrow$  **Appetite**)  
methylphenidate, amphetamines, **Modafinil**  
**Non-stimulants:**  
atomoxetine (NRI), alpha-2 agonist

(NE  $\uparrow$ ) (Clonidine, Guanfacine)

[Gender identity begins to form at age 3 y/o]

- Preference for dress & play activities of opposite gender
- Discomfort with anatomical organs of own sex
- "trapped in another sex's body" : **Gender Dysphoria**

## Psychiatry of 'Bad' Children

### Conduct Disorder (CD)

Persistent violation of societal norms or rights of others

### Oppositional Defiant Disorder (ODD)

Defiant, argumentative, and vindictive behaviour **toward authority figures** >6months

### Disruptive Mood Dysregulation Disorder (DMDD)

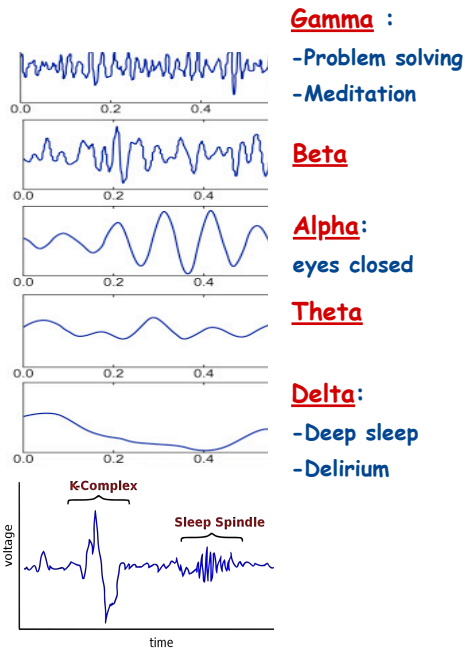
- After 6yrs, Before 10yrs
- Severe irritability + frequent temper outbursts
- Between outbursts: mood is **persistently irritable**/angry

### Intermittent Explosive Disorder

- After 6yrs
- Sudden recurrent episodes of outbursts, out of proportion to provocation, provide relief, followed by remorse.
- Between outbursts: mood is **normal**

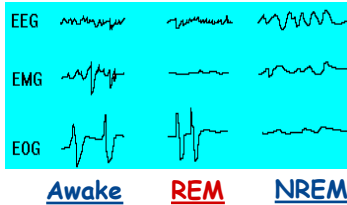
# Sleep and related disorders

Good B A T Dance



Photosensitive SCN → NE → Pineal Gland → ↑ Melatonin → Sleep

Awake (eyes open)	Beta	Parasomnias
Awake (eyes closed)	Alpha	
Stage N1 (5%)	Theta	
Stage N2 (45%)	Sleep spindles, K-complexes	Bruxism
Stage N3 (25%) [Restorative sleep]	Delta	• Bedwetting • Sleepwalking • Night terrors (Doesn't remember)
REM sleep (25%) [Paradoxical sleep]	Beta, PGO, Sawtooth waves	- Memory processing - No motor tone, ↑ Genital blood flow * Nightmares (remembered) * PTSD (DOC-Prazosin)



	REM	NREM
Ach	↑	↓
5-HT, NE	↓	↓
GH	↓	↓
PRL	↑	↑

Reduced REM Latency: Narcolepsy, Depression

Alcohol, BZD, Elderly : ↓ REM, ↓ N3

## NARCOLEPSY

- Rapid-onset profound episodes of sleepiness
- ≥ 3 times per week for ≥ 3 months, Sleep Attacks
- ↓ ↓ REM latency – sawtooth waves
- Hypnagogic/ -pompic hallucinations, Cataplexy
- ↓ ↓ Hypocretin / orexin from lateral hypothalamus

Rx: **Modafinil**

- New: Pitolisant (H3 antagonist)
- Solriamfetol (NDRI)

## Periodic Limb Movement syndrome

Leg movement during sleep

DOC: **BZD**

## Restless Leg syndrome

Restlessness during sleep, relieved on moving

DOC: **Gabapentin > Ropinirole**

## INSOMNIA :

≥ 3 nights a week for ≥ 3 months

Mx: - Eliminate cause , **Maintain Sleep Hygiene**

-Zolpidem, Zaleplon, Zopiclone → **No dependence**

-Melatonin, Ramelteon

-Suvorexant, Daridorexant → **Orexin ↓**

## Klein - Levine

Hypersomnia, Hyperphagia, Hypersexuality

## Erectile dysfunction

Nocturnal intumescence + : **Psychogenic**

MCC: **DM**

Mx: **PDE-5 ⊖** → Sildenafil : **S/E: Hypotension**

**Blue Vision (PDE 6 ⊖)**

## Premature ejaculation

Mx: **SSRI, Squeeze technique/ Stop-start technique/ Sensate focussing**

## Nocturnal enuresis

Urinary incontinence during sleep ≥ 2 times per week for ≥ 3 months in ≥ 5 years old

Mx: **Alarm therapy → Desmopressin/ Imipramine**

# Somatization disorders

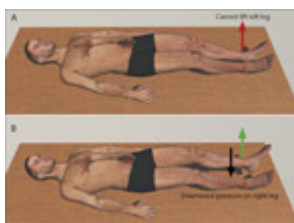
## UNINTENTIONAL

Illness Anxiety Disorder/ Hypochondriasis	Somatic Symptom Disorder	Conversion/ Functional Neurological D/o
<p>&gt; 6 mo</p> <ul style="list-style-type: none"> <li>• Preoccupation of having DIAGNOSIS of serious illness</li> <li>• No/ mild symptoms</li> <li>• Consistently negative Ix</li> </ul>	<p>&gt; 6 mo</p> <ul style="list-style-type: none"> <li>• Excessive preoccupation with 1 or more symptoms</li> <li>• Stressor +</li> </ul>	<p>(Seizures/ Paralysis)</p> <ul style="list-style-type: none"> <li>• Unexplainable neurological d/o</li> <li>• Stressor +</li> <li>• La Belle Indifference</li> <li>• Astasia abasia</li> </ul>

## INTENTIONAL

	Secondary gain	Stressor
Malingering	+	-
Munchausen/ Factitious D/o	-	-

"sick role"



Hoover's sign

# Psychotherapy

Type	Goals	Indication
<p><u>Cognitive Behavioural Therapy (CBT)</u> Aaron Beck</p>	<ul style="list-style-type: none"> <li>- Beck's cognitive triad:                             <ul style="list-style-type: none"> <li>- Hopeless</li> <li>- Helpless</li> <li>- Worthless</li> </ul> </li> <li>- <u>Maladaptive Schema</u></li> <li>- Automatic negative thought</li> <li>- Dysfunctional beliefs</li> <li>- Cognitive distortions</li> </ul>	<ul style="list-style-type: none"> <li>- Depressive disorders</li> <li>- Anxiety disorders</li> <li>- Trauma disorders (EMDR)</li> <li>- Anger disorders</li> </ul> <p>} TOC</p>
<p><u>Interpersonal Therapy</u></p>	<ul style="list-style-type: none"> <li>- Helps with relationship building</li> </ul>	<ul style="list-style-type: none"> <li>- Disorders of Early Development</li> </ul>
<p><u>Motivational Interviewing</u></p>	<ul style="list-style-type: none"> <li>- Employs trans-theoretical model of change</li> </ul>	<ul style="list-style-type: none"> <li>- Substance misuse</li> <li>- Weight loss</li> <li>- Medication adherence</li> </ul>
<p><u>Supportive Therapy</u></p>	<ul style="list-style-type: none"> <li>- Provides emotional support &amp; empathy</li> <li>- Employed during stressful life events</li> </ul>	<ul style="list-style-type: none"> <li>- Grief</li> <li>- Brief hardship/ crises</li> <li>- Low motivation</li> <li>- Low IQ</li> </ul>

# MISCELLANEOUS

## NEUROIMAGING IN PSYCHIATRY

- **Autism:** ↑ ↑ Total Brain volume
- **Schizophrenia:** ↑ ↑ Cerebral Ventricles
- **Obsessive-Compulsive disorder:** Abnormalities in Orbito-Frontal Cortex & Striatum
- **Panic disorder:** ↓ ↓ volume of **Amygdala** & Left Temporal lobe
- **PTSD:** ↓ ↓ Hippocampal volume

CAGE, AUDIT: **Alcohol Abuse**

SCOFF: **Eating Disorder**

PANSS: **Schizophrenia**

Confusion assessment method (CAM): **Delirium**

SPIKES: **Breaking Bad News**

HEADSS: **Adolescents**

PEARLS: **Building rapport**

PANDAS: **Pediatric AI Neuropsychiatric Disorder Associated with Gp A Streptococcus**

# TIMELINES in a Nutshell !

Brief psychotic disorder <1 mo  
Schizophreniform 1 - 6 mo  
Schizophrenia 6 mo  
Schizoaffective ≥2 wks of psychotic Sx without mood Sx  
Delusional disorder 1 mo

Depression >14 d  
Bipolar disorder / Mania >7 d  
Hypomania >4 d  
Persistent depressive disorder (Dysthymia , Cyclothymia) > 2 yrs

OCD >2 wks  
Panic disorder >1 mo

GAD } >6 mo  
Phobia }

Acute stress reaction <1 mo  
PTSD >1 mo  
Adjustment disorder <6 mo

Eating disorder  
Narcolepsy  
Insomnia } 3 mo  
Nocturnal enuresis  
(@ ≥5 years of age)

Selective mutism } ≥1 mo  
Separation anxiety }

Oppositional defiant disorder } ≥6 mo  
Specific learning disability }  
ADHD }

Tourette disorder } ≥1 yrs  
Disruptive mood regulation disorder }

# Gender summary

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## Female Predominance

Rett  
Rapid cycling bipolar  
Depression  
BPD 2  
GAD  
Panic disorder  
Borderline PD  
Conversion D  
OCD

## Male Predominance

Autism  
Antisocial PD  
ADHD

## Male = Female

Schizophrenia  
BPD 1