

## Psych SAQs 2020

### Prab Group Answers

1)

**a) Classification of antidepressants.**

They can be classified according to the Mechanism of Action.

SSRIs- Fluoxetine

SNRIs- Duloxetine and venflaxine

SARIs- Trazodone

MAOs- Selegiline, Tranylcypromine

TCAs- Amitryptiline and Imipramine

Nassas

- Check on side effects
- These drugs have other indications aside from being antidepressants
- Symptoms of depression and mania... 2 different spectrums
- Drug refractory therapy- ECT

**b) 3 Factors that affect increased adherence to medication.**

Adherence- Factors not associated with patients...

- Drug factors- cost, availability, dosing frequency, side effects, route of administration
- Disease- insight, the severity,
- Social- family, work,

2)

**a) 6 symptoms of a panic attack**

Cognitive- sense of impending danger, can't cope, feeling apprehensive

Physiological- symphathetic ish... 4/13 for diagnosis... addd

**Mnemonic**  
The mnemonic **STUDENTS FEAR the 3 C's** can be used to remember the panic disorder criteria:

- **S** - Sweating
- **T** - Trembling
- **U** - Unsteadiness, dizziness
- **D** - Depersonalization, derealization
- **E** - Excessive heart rate, palpitations
- **N** - Nausea
- **T** - Tingling
- **S** - Shortness of breath
- **FEAR** of dying
- **FEAR** of losing control
- **FEAR** of going crazy
- **C** - Chest pain
- **C** - Chills
- **C** - Choking

Behavioural response- avoid certain situations and impaired task performance

**b) Medical conditions that may produce similar effects.**

- i) CNS- Preclinical Parkinsonism,
- ii) CVS- MI, Tachyarrhythmias, Pericarditis, Heart failure(PNDs)
- iii) Endocrine- Hypothyroidism, Hypoglycemia, Pheochromocytoma, Cushings
- iv) Resp- PE, Acute Asthmatic attack
- v) GIT- Acute Abdomen
- vi) Substance Use- Alcohol withdrawal/ toxicity, Cocaine use
- vii) Drugs- Overdose of symphathomimetics

c) **Treatment of panic attacks**

Pharmacotherapy- Sympatholytics, anxiolytics, sedative hypnotics

Psychotherapy- Behaviour Therapy

3)

a) **4 differential diagnosis of ADHD**

**ADHD DSM**

| Diagnostic criteria (according to the DSM-5) <sup>18</sup> |   |
|--|---|
| <b>A</b>   | <p>Pattern of inattention and/or hyperactivity that is inconsistent with the developmental level of the individual and lasts for <math>\geq 6</math> months</p> <ul style="list-style-type: none"> <li>• Inattention is characterized by <math>\geq 6</math> of the following in children or <math>\geq 5</math> of the following in adolescents and adults (<math>\geq 17</math> years of age):               <ul style="list-style-type: none"> <li>◦ Poor attention to details at work/school</li> <li>◦ Difficulty sustaining attention during tasks</li> <li>◦ Does not listen when spoken to directly (e.g., distraction in the absence of an obvious interruption)</li> <li>◦ Inability to complete tasks/instructions at work/school (e.g., easily sidetracked)</li> <li>◦ Struggles to organize tasks/activities (e.g., disorganized work, misses deadlines)</li> <li>◦ Prefers to avoid tasks that require a high amount of mental effort (e.g., homework, preparing reports)</li> <li>◦ Loses things necessary to complete tasks (e.g., stationery, documents)</li> <li>◦ Easily distracted</li> </ul> </li> <li>◦ Forgetful (e.g., does not pay bills, does not do homework)</li> <li>• Hyperactivity and impulsivity are characterized by <math>\geq 6</math> of the following in children or <math>\geq 5</math> of the following in adolescents and adults (<math>\geq 17</math> years of age):               <ul style="list-style-type: none"> <li>◦ Fidgets or squirms in seat</li> <li>◦ Often leaves their seat during inappropriate situations (e.g., during meetings or in class)</li> <li>◦ Restless (runs about in inappropriate situations)</li> <li>◦ Unable to carry out tasks quietly</li> <li>◦ Talks excessively</li> <li>◦ Answers questions prematurely or for others</li> <li>◦ Difficulty waiting their turn (e.g., has problems with lines)</li> <li>◦ Interrupts other people (e.g., in conversation, during activities)</li> </ul> </li> </ul> |
| <b>B</b>   | • Several symptoms are present at $< 12$ years of age.  |
| <b>C</b>   | • Symptoms are present in $\geq 2$ settings (e.g., school, home, work).   |
| <b>D</b>   | • Symptoms interfere with important levels of functioning (e.g., school, work).   |
| <b>E</b>   | • Symptoms are not due to a mental disorder.  |

| Psychiatric Disorders  | Medical            |
|--|--------------------|
| Conduct Disorders  | TBIs               |
| OCD  | Sleeping Disorders |
| Specific learning Disorder   | Hyperthyroidism    |
| <u>Autism Spectrum Disorder- Autistic,</u><br><u>Pervasive Developmental disorder, Asperger</u><br><u>Syndrome</u> | Hypoglycemia       |
| Substance  | Anemia             |
|  | Lead Poisoning     |
|  |                    |

b) **Medications used in the treatment of ADHD.**

Methylphenidate: Amphetamine like, MOA- promote release of NE

Dextroamphetamine

Atomoxetine: A selective reuptake inhibitor

Guanfacine

#### 4) Antipsychotics

a) Give examples of each. just add guys.... im tayad of typingggg.

| a) Typical Antipsychotics | b) Atypical Antipsychotics |
|---------------------------|----------------------------|
| Haloperidol               | Olanzapine                 |
| Chlorpromazine            | Clozapine- refractory ish  |
| Fluphenazine              | quitepine                  |
| Pimazide                  | ???                        |
| Trifluphenazine           |                            |
|                           |                            |
|                           |                            |

#### b) Outline examples of neurological side effects of antipsychotic medications

- Acute dystonia : features include spasm of tongue, throat, face, jaw, eyes, back muscle
- Akathisia : motor restlessness, inability to stay still
- Pseudo-parkinsonism : Bradykinesia, rigidity, resting tremor, stiff gait
- Tardive dyskinesia: involuntary movements of the mouth, tongue, limbs, face anf resp muscles


#### c) What would you do to alleviate above mentioned side effects

- Acute dystonia : benztropine
- Akathisia : reduce dose of antipsychotic, add Beta-bloklers,
- Pseudo-parkinsonism : Add anticholinergics or amantadine, benzodiazepines may also be effective


#### d) Mention other side effects of antipsychotics

<https://next.amboss.com/us/article/ANORdg?q=antipsychotics#Ze835049c732df10f537fbaa3b64fe88c>


### Side effects of atypical antipsychotic drugs




**Weight Gain**  
Mean weight gain in patients receiving standard doses of antipsychotics over a 10-week period:  
4.45 kg with clozapine,  
4.15 kg with olanzapine,  
2.92 kg with sertindole,  
2.10 kg with risperidone,  
and 0.04 kg with ziprasidone.



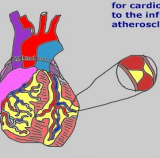
**Cataracts**  
Some drugs may be associated with an increased risk of ocular lens opacities. Also, patients with schizophrenia often have risk factors for lens opacities, such as Diabetes, hypertension and poor nutrition.



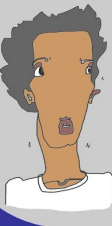
**Sexual side effects**  
Antipsychotic-induced sexual dysfunction is related to the effects of the drugs on alpha-1 and alpha-2 adrenergic, H1 histamine and dopaminergic receptors, in particular to the blockade of D2 receptors in pituitary lactotroph cells, which leads to an excess of prolactin secretion



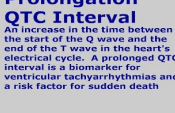
**Diabetes Mellitus**  
The prevalence of type-2 DM in people with schizophrenia is more than twice higher than in the general population. Most of these studies indicate that drugs associated with greater weight gain.



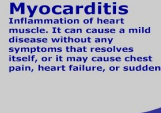
**Hyperlipidemia**  
A high concentration of lipid in the blood, an increased risk for cardiovascular disease due to the influence on atherosclerosis



**Extrapyramidal symptoms** Movements disorders, kinesia (inability to initiate movement) and akathisia (inability to remain motionless)



**Prolongation QTc Interval**  
An increase in the time between the start of the Q wave and the end of the T wave in the heart's electrical cycle. A prolonged QTc interval is a biomarker for ventricular tachyarrhythmias and a risk factor for sudden death



**Myocarditis**  
Inflammation of heart muscle. It can cause a mild disease without any symptoms that resolves itself, or it may cause chest pain, heart failure, or sudden

## 5) ECT

a) **Give 4 indications of ECT-** refractory to drugs, compliance, tolerating side effects, contraindication of pharmacotherapy, adjunct to treatment

- Major depression disorder
- Schizoaffective disorder
- Bipolar mood disorder : manic episodes not responding to mood stabilizers
- Highly suicidal or pregnant depressed patients
- Neuroleptic malignant syndrome
- Post partum psychosis

b) **What medications should be withdrawn before ECT and why?**

- Benzodiazepines- anticonvulsant action
- Lithium carbonate- increased post ictal delirium, prolonged seizure activity
- Metformin??
- Anticonvulsants- bcz of their anticonvulsant effect

c) **What are the steps to be followed in management of patients post ECT**

- Observe and record the vitals of the patient
- Place the patient on the side lying position, clean secretions
- Transfer the patient to the recovery room
- Allow the patient to sleep for 30mins to 1 hour
- Let the patient feed when fully conscious (start with drinks)

d) **What are the complications of ECT**

- Headache
- Memory loss
- Confusion
- Death

- More common <sup>[2]</sup>
  - Reversible memory loss: retrograde more often than anterograde amnesia (typically resolves within 6 months of last treatment) ☒
  - Tension-type headache ☒
  - Nausea
  - Transient muscle pain
  - Disorientation
- Less common
  - Skin burns
  - Temporary, short-term functional disorders (such as amnesic aphasia)
  - Prolonged seizure

## 6)

a) **Give 5 symptoms of opioid intoxication**

- Resp: Resp depression
- GIT: Constipation, reduced gag reflex
- Cvs: low HR, BP
- Vitals: hypothermia
- Musculosk: rhabdomyolysis, myoclonic jerks
- CNS: Slurred speech, drowsiness, confusion, seizures

- **Clinical features**
  - Altered mental status, euphoria, CNS depression (intensifies in combination with other CNS-depressing substances, such as alcohol, benzodiazepines)
  - Bilateral miosis (pinpoint pupils) ☒
  - Respiratory depression (↓ respiratory rate and ↓ tidal volume), hemorrhagic lung edema ☒
  - Myoclonic jerks ☒, seizures ☒
  - Constipation
  - ↓ Gag reflex
  - ↓ Bowel sounds
  - ↓ Heart rate and ↓ blood pressure, hypothermia ☒
  - Rhabdomyolysis ☒

! Altered mental status, respiratory depression, and miosis are the classic triad of opioid intoxication. However, the absence of miosis does not rule out opioid intoxication.

## b) 5 features of alcohol use disorder

- Persistent desire or unsuccessful effort to cut down or control alcohol use
- Alcohol taken in large amounts or longer periods
- Strong desire, craving or urge to take alcohol
- Developed tolerance: need to increase amount of alcohol to achieve intoxication
- Alcohol is taken to relieve or avoid withdrawal
- Behavioural changes and bad company

- **11 criteria based on the patient's history within the past 12 months**
- A diagnosis of AUD is established once  $\geq 2$  criteria are met.
  1. Drinking more or over a longer period than intended
  2. Tried to cut down or stop more than once, but couldn't
  3. Spends a lot of time drinking or recovering from aftereffects
  4. Strong desire to drink alcohol
  5. Drinking has a negative impact on everyday function (social, work etc)
  6. Continued drinking despite social or interpersonal problems
  7. Given up interests and activities that were important because of drinking
  8. Drinking in physically hazardous situations more than once
  9. Continued drinking despite physical or psychological problems
  10. Increasing amount of drinks to maintain same effects as before
  11. Features of withdrawal when the effects of alcohol wear off (see alcohol withdrawal below)
- **Severity**
  - **Mild:** presence of 2–3 criteria
  - **Moderate:** presence of 4–5 criteria
  - **Severe:** presence of  $\geq 6$  criteria

## c) List two drugs used in the treatment of opioid use disorder

- Naltrexone
- Buprenorphine

## Acute management

1. **Airway management:** head-tilt/chin-lift maneuver and assisted breathing ☒ to improve oxygenation)
2. **Naloxone**
  - Slow administration to prevent acute withdrawal syndrome
  - Neutralization of opioid effects → restoration of ventilation and counteraction of CNS depression
3. Management of complications (e.g., diazepam for seizures)
4. **Naltrexone:** after detoxification to prevent relapse

### d) 5 symptoms of alcohol withdrawal

- Autonomic symptoms: sweating, palpitations, tachycardia
- CNS: Headaches, Anxiety, Insomnia & vivid dreams
- GI: Anorexia, nausea, vomiting
- Complicated

#### Alcohol withdrawal seizures [2][3]

- **Onset:** usually 8–48 hours after cessation of or reduction in alcohol consumption ☒ [2]
- **Clinical features**
  - Usually brief, generalized tonic-clonic seizures
  - Often a single episode



Withdrawal seizures may occur without prior significant features of AWS and may be the presenting symptom in some patients.

#### Alcohol-induced psychotic disorder (alcoholic hallucinosis) [2][3]

- **Onset:** usually 12–24 hours after cessation of or reduction in alcohol consumption [2]
- **Clinical features**
  - Consciousness is usually intact.
  - **Vital signs** may be normal.
  - Auditory and/or visual hallucinations are common (tactile hallucinations are also possible).
  - **Delusions**
- **Duration:** 24–48 hours after onset [2]



It may be challenging to distinguish alcoholic hallucinosis from the hallucinations associated with delirium; patients with delirium usually have impaired consciousness and abnormal vital signs.

## Alcohol withdrawal delirium (delirium tremens) [2][3]

- **Definition:** persistent **alteration of consciousness** and **sympathetic hyperactivity** due to alcohol withdrawal
- **Onset:** usually **72–96 hours** after cessation of or reduction in alcohol consumption
- **Clinical features**
  - Symptoms of altered mental status
    - **Impaired consciousness** and disorientation
    - Visual and tactile hallucinations (usually small moving objects, e.g., mice, crawling insects)
    - Increased suggestibility ☒
  - Worsening symptoms of autonomic instability
    - **Tachycardia**
    - **Hypertension**
    - **Anxiety**
    - Nausea
    - Sweating
  - Worsening symptoms of neurological impairment
    - Psychomotor agitation (e.g., fidgeting, restlessness, tearfulness)
    - **Alcohol withdrawal seizures** can occur during this phase.
    - Insomnia
    - Rest and intention tremor (first high frequency, then low frequency)
- **Duration:** usually 2–3 days; may be lethal

- a) **3 indications?? Question not clear**
- b) **List 3 mature and 3 immature defenses mechanisms**

Mature: Suppression, sublimation, altruism

Immature: Regression, Acting out, Denial, Displacement, Projection, Rationalization, Reaction formation

- c) **What are the benefits of family therapy**

- Just mouth stuff....

- d) **Define the following terms- confirm this answer :(**

- i) Systemic desensitization- Pt attains a state of complete relaxation and is then exposed to stimulus that elicit anxiety.
- ii) Flooding- Pt is encouraged to confront a maximum intensity anxiety provoking stimulus directly or through imagining without initial relaxation.