

Follow the instructions for the online assignment attached. The assignment must be completed and placed in Unit 1 Chapter 3: Psychopharmacotherapy Assignment Dropbox by 0800 on 5/28/2025. In order to receive full credit (0.5H class time) for this assignment, it must be completed in its entirety by the due date/time assigned. Any assignment not completed in its entirety will result in missed class time.

Learning Activity 4.1.

Psychotropic Medication Quiz

1. What is the mechanism of action by which antidepressant medications achieve the desired effect (regardless of the different physiological processes by which this action is accomplished)?
 - The mechanism of action is inhibition or the blocking of norepinephrine reuptake, as well as dopamine and or serotonin.
2. For what must the nurse be on the alert with the client who is receiving antidepressant medication?
 - Be on alert for seizure activity.
3. As the nurse, when would you expect the client to begin showing signs of symptomatic relief after the initiation of antidepressant therapy?
 - 10-14 days and up to 4-8 weeks.
4. Name an example of a tricyclic antidepressant _____ Doxepin _____.
Name an example of an MAOI _____ Tranylcypromine _____.
Name an example of an SSRI _____ Fluoxetine _____.
5. Describe some common side effects and nursing implications for tricyclic antidepressants.
 - Common side effects are anticholinergic effects: dry mouth, photophobia, urine retention, blurred vision, tachycardia, and constipation.
6. _____ Hypertensive crisis _____ is the most potentially life-threatening adverse effect of MAOIs. Symptoms for which the nurse and client must be on the alert include: _____ headache, nausea, and increased BP/HR _____. What must be done to prevent these symptoms from occurring? (Your answer must include some

examples.) - Avoid tyramine rich foods: banana, smoked fish, beer/wines, aged cheeses, cured meats, fermented foods, etc.

7. Lithium carbonate is commonly prescribed for __bipolar disorders__. Many times when these individuals are started on lithium therapy, the physician also orders an antipsychotic medication. Why might he or she do so?
 - This is done to promote sleep, mood stabilization, decrease agitation, and anxiety.
8. There is a narrow margin between the therapeutic and toxic serum levels of lithium carbonate. What is the therapeutic range? List the initial signs and symptoms of lithium toxicity.
 - The therapeutic range is 0.8-1.4 mEq/L for the initial treatment, 0.4-1.0 mEq/L for the maintenance levels, the toxicity level is 1.5 mEq/L.
 - The initial signs and symptoms of lithium toxicity are nausea, vomiting, diarrhea, tremors, fatigue, muscle weakness, increased thirst, frequent urination, lightheadedness, drowsiness, and loss of appetite.
9. Describe some nursing implications for the client on lithium therapy.
 - Monitor plasma lithium levels, effects begin in 7-14 days, adequate fluid and sodium intake is required, monitor for toxicity (nausea, vomiting, sweating), and administer as prescribed.
10. What is the mechanism of action for anxiolytics (with the exception of buspirone)?
 - Enhance gamma-aminobutyric acid (GABA) activity, blocking the reuptake of serotonin and norepinephrine, or modulating specific receptors in the brain.
11. What is the most commonly used group of anxiolytics? Give two examples.
 - Benzodiazepines: Xanax (alprazolam) and Librium (chlordiazepoxide).
12. What are the most common side effects of anxiolytics?
 - Decreased cognitive function, lightheadedness, sedation, and ataxia.
13. What must the client on long-term anxiolytic therapy be instructed in order to prevent a potentially life-threatening situation?
 - Do not stop any anxiolytic therapies abruptly.

14. What is thought to be the mechanism of action that produces the desired effect with antipsychotic medications?
- Block dopamine (D2), acetylcholine, histamine and norepinephrine receptors in the brain and periphery. Inhibiting psychotic manifestations, believed to be a result of D2 blockade in the brain.
15. Phenothiazines are an example of a “typical” antipsychotic group. Give two examples of phenothiazines and two examples of the newer “atypical” antipsychotics.
- Phenothiazines: Chlorpromazine (Thorazine) and fluphenazine (Duraclon).
 - “Atypical” antipsychotics: Risperidone (Risperdal) and aripiprazole (Abilify).
16. Describe potential adverse hormonal effects associated with antipsychotic therapy.
- Gynecomastia (breast enlargement), galactorrhea (lactation unprompted), and menstrual irregularities.
17. Agranulocytosis is a potentially very serious side effect of antipsychotic therapy. The nurse and client should be on the alert for symptoms of _infection s/s due to low white blood cell count: cough/congestion__, __fever__, and _sore throat__.
18. Neuroleptic malignant syndrome (NMS) is a rare but potentially fatal side effect of antipsychotic drugs. List symptoms for which the nurse must be on the alert when assessing for NMS.
- Sudden high grade fevers, blood pressure fluctuations, dysrhythmias, muscle rigidity, diaphoresis, drooling, LOC that may lead into coma.
19. Describe the symptoms of extrapyramidal side effects associated with antipsychotic therapy.
- Acute dystonia: client can experience severe spasms of the neck, tongue, face, or back. This is a crisis situation that requires emergency treatment.

20. What is the classification of medication that is commonly prescribed for drug-induced extrapyramidal reactions? Give two examples of these medications.

- Anticholinergics: Benztropine and diphenhydramine,

21. Describe a potentially life-threatening situation that could occur in the client who abruptly withdraws from long-term use of CNS stimulants.

- Delirium, rhabdomyolysis, muscle spasms, withdrawal (seizures).

Homework Assignment Questions and Answers

Please read the chapter and answer the following questions:

1. Identify three priority safety concerns for each class of psychotropic medications.

Antianxiety Agents

- Tolerance and physical dependence
- Orthostatic hypotension
- Increases the other effects of other CNS depressants and antihistamines

Antipsychotics (novel)

- Neuroleptic malignant syndrome (muscle rigidity, altered mental status, autonomic instability)
- Cardiovascular monitoring (arrhythmias, QT interval changes)
- Monitor blood sugar/ lipid levels/ weight

Antipsychotics (phenothiazines and haloperidol)

- Seizures
- Orthostatic hypotension (QT interval changes possible)
- Fall risk
- Extrapyramidal reactions

MAO Inhibitors

- Hypertensive crisis
- Serotonin syndrome (confusion, fever, dilated pupils)
- Possible increased suicidal thought or behaviors

SSNRIs

- Increased risk of bleeding
- Increased risk of suicidal behavior or thoughts
- Serotonin syndrome (agitation, confusion, seizures)

SSRIs

- Antidepressant discontinuation syndrome (anxiety, agitation, flu like symptoms)
- Risk of increased suicidal thoughts or behaviors
- Serotonin syndrome (elevated serotonin levels in the brain)

Tricyclic antidepressants

- Increased seizure risk
- Increased risk of suicidal thoughts and behaviors

- QT interval changes, arrhythmias (vfib)

2. Differentiate primary actions and side effects for traditional versus atypical antipsychotics.

- Traditional antipsychotics target dopamine receptors to reduce psychotic symptoms like hallucinations and delusions. They have a higher risk of causing extrapyramidal symptoms.
- Atypical antipsychotics block dopamine and serotonin receptors, which gives the patient more symptom relief and reduce risk of movement disorders. They can cause weight gain and metabolic disturbances.

3. Differentiate primary actions and side effects for tricyclic versus SSRI antidepressants.

- Tricyclic antidepressants work by blocking the reuptake of serotonin and norepinephrine, increasing the availability of these neurotransmitters in the synapses. Leading to mood regulation and reduced symptoms of depression.
- SSRI antidepressants primarily target blocking serotonin reuptake causing higher serotonin levels in the brain. Reducing symptoms of stress and anxiety.